OLD!

THE ESSENTIAL GUIDE TO C[illegible] GAMES

retro GAMER

THEA500 MINI
WE SPEAK TO [illegible]E CREATORS BEHIND A [illegible] AMIGA [illegible]VIVAL

Only Inside

THE [illegible]
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HOW THE TV FAMILY BECAME A VIDEOGAME SUCCESS STORY

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THE RETROBATES

WHAT'S THE MOST TECHNICALLY IMPRESSIVE N64 GAME YOU'VE PLAYED?

DARRAN JONES

Sin And Punishment. I remember taking it into work and some members of *games™* didn't believe it was running on an N64.
Expertise: Juggling a gorgeous wife, two beautiful girls, a SNES-loving cousin and an award-winning magazine, all under one roof!
Currently playing:
Magic: The Gathering Arena
Favourite game of all time:
Strider

TIM EMPEY

The Legend Of Zelda: Ocarina Of Time was unlike anything I'd played before. That feeling of, "Oh what's over there?" and then just exploring. Fantastic.
Currently playing:
Hades
Favourite game of all time:
God Hand

NICK THORPE

I was always jealous of *1080° Snowboarding*, because it looked so much more polished than *Cool Boarders 2* on my PlayStation.
Expertise: Owning five Master Systems and a Mark III
Currently playing:
Sakura Wars: So Long, My Love
Favourite game of all time:
Sonic The Hedgehog

ANDY SALTER

Never really played much N64 back in the Nineties and I'd already started moving away from console gaming due to the PC. I guess *GoldenEye 007* was technically impressive… for a console game.
Expertise: Modding games, no 'vanilla' versions for me, thanks!
Currently playing: *M&B2: Bannerlord…* Modded of course
Favourite game of all time:
Rome: Total War

IAIN LEE

Oh come on. *GoldenEye 007.* That's the only answer, right? The four-player action is still unbeaten.
Expertise: Buying expensive stuff on eBay then never touching it
Currently playing:
Goose Goose Duck
Favourite game of all time:
Elite (BBC Model B)

MARTYN CARROLL

Sin And Punishment. I remember Darran showing it running on an NTSC system at a retro show and people couldn't believe it was an actual N64 game. (I approve of this recollection – Ed)
Expertise: Sinclair stuff
Currently playing:
Stranded Deep
Favourite game of all time:
Jet Set Willy

GRAEME MASON

Looking back I don't think *GoldenEye 007* was a huge technological leap but I remember thinking it looked great. Maybe I was taken by the fact it was an actual decent movie licence.
Expertise: Adjusting the tape azimuth with a screwdriver
Currently playing: *Alien Breed*
Favourite game of all time:
Resident Evil 4

RORY MILNE

I remember being blown away by *Diddy Kong Racing.* I loved the way the sun glanced off the racers, the near dark areas that were seemingly lit by neon, and the firework-like projectiles.
Expertise: The game that I'm writing about at the time of writing
Currently playing:
Boulder Dash
Favourite game of all time:
Tempest

PAUL ROSE

For me, nothing tops that initial shock of *Super Mario 64.* Not even the game itself, but the stretchable Mario face on the title screen.
Expertise: Winging it
Currently playing:
Space Invaders
Favourite game of all time:
Half-Life 2

LOADING...

Few consoles have made an impact on me like the Nintendo 64 did and one of my biggest regrets was selling off my original console and countless games when my daughter Emily was born.

The N64 may not have been first out of the gate for delivering 3D gaming experiences, but it was arguably the leader when it came to innovative 3D games. In my opinion you'll find no adventure better than *The Legend Of Zelda: Ocarina Of Time* on any of the N64's competitors and you won't find better platformers than *Super Mario 64* or *Banjo-Kazooie*. *GoldenEye 007* remains peerless and I can't think of any kart-based racers better than *Mario Kart 64*. The machine certainly wasn't perfect and its library of games were dwarfed by the libraries of both the Saturn and PlayStation, but I simply didn't care.

The N64 will always share a special place in my heart because it's the only console where my wife Melanie ever joined me for gaming sessions, but it also left an impression because so many of its worlds felt real and tangible – almost as if they were places I could actually visit.

This month we speak to the clever coders that pushed the hardware of Nintendo's console to impossible limits, something we've never covered before with regards to the well loved machine. And if the N64 doesn't do much for you we've got plenty more great stuff ranging from *Dizzy* and *Double Dragon II* to Falcom and *Ghosthunter.*

Stay safe and enjoy the magazine.

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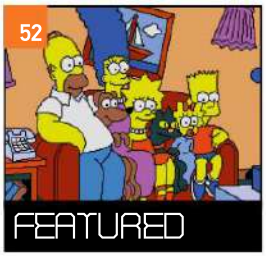

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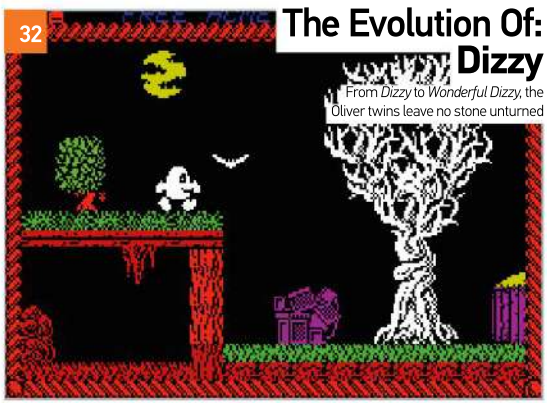

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A MINIATURE REVELATION

Retro Games' Chris Smith on creating a new mini system

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Nick continues his journey into the past and begins to approach the Christmas silly season of 2004

Retro Games wasn't fooling anyone when it teased an image that looked suspiciously like an Amiga 500 back in October 2020. That tease became a reality in early August with the reveal of its THEA500 Mini, a brand-new miniature system based on Commodore's popular Amiga 500. Despite having worked on the new system for the past year, not to mention producing THEVIC20 and working on updates for THEC64, Retro Games' chief technology officer Chris Smith revealed to us that this new system has been planned for quite a while now. "We had been planning the project for several years and had already secured the various licences needed to be able to start the project."

Commodore's 16-bit machine is incredibly popular, but it's not the only loved system in the Commodore range. We were keen to know why Retro Games settled on the Amiga 500 rather than the 600 or 1200 models. "This has been quite an involved process," admits Chris. "Long before we settled on the name and shape of THEA500 Mini we considered what users imagine when they think of the Amiga. So we let the process be user led and spoke at length with the wider Amiga community with which we are involved. The shape had to be practical, so that meant the Amiga 1000 would not have worked with its separate keyboard, base and monitor, and even though the more compact 600 or 1200 may arguably have been an easier build choice for us, they were not what the people nostalgically described when we asked them about the Amiga – it was invariably the classic Amiga 500. THEA500 Mini looks deceptive though, even though it looks exactly like a shrunken Amiga 500, it has the capabilities of a range of machines."

While the new system looks extremely similar to the classic micro, that keyboard is just for show, similar to the original miniature C64 that Retro Games released. "The keyboard is non-functional, and the keys are tiny," explains Chris, "but you can plug in a USB keyboard if you want and use that to input into whatever it is you are running." While the featured keyboard isn't functional, the included mouse does work and we feel it's an essential and really pleasing inclusion. "There was no escaping how important the mouse was to the Amiga to exclude it," continues Chris, who went on to tell us that there were two choices for the user interface: using the included game controller, or pointing and clicking with a mouse. "The dynamics that underpin these

» Here you can see just how big Retro Games' new system actually is.

The Chaos Engine
In this steampunk top-view run and gun game you must battle the Chaos Engine's creations across Victorian England before taking on its inventor Baron Fortesque.
Choose two mercenaries from a group of six. Traverse four landscapes collecting power ups, gold and keys and solving puzzles. Spend your riches on upgrading your weapons and character attributes.
Save states
2:22
6:46
1:43
Select
Save Game
Close

» [THEA500 Mini] Saves states will be included, meaning there's a much higher chance of finishing those tougher games.

two approaches are fundamentally different, and it is not easy to have them coexist in a single user interface without compromising and ending up with something less than ideal," he continues. "The game controller offers the most intuitive interface with its multiple direction and function buttons, and is what today's gamers are familiar using, and it is needed for a majority of Amiga games, so we designed the user interface around that and made sure the included mouse-driven games are also perfectly controllable with the game controller, so you only have to reach for the mouse if you want to."

Of course, you can't have a mini system without games and you'll find 25 gems on THEA500 Mini, including *Worms: The Director's Cut, Pinball Dreams, Kick Off 2, Another World* and *Zool*. As you'd expect, all the games are officially licensed as well. "We work in the games industry and so have great relationships with various game studios and indie developers that continue to own or have acquired the licences to classic titles," confirms Chris. "This gives us access to a wide range of games, and we're really excited to secure some amazing titles that were really defining for the platform."

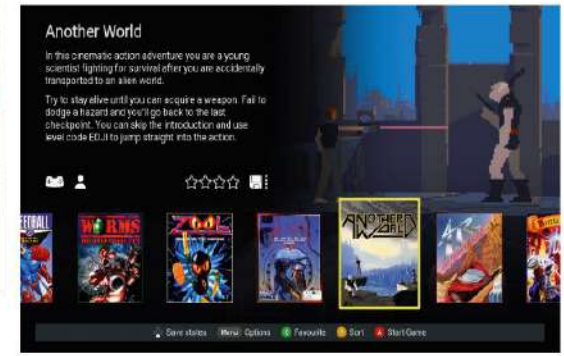
That's not all though as the new system will also give you the option to side-load your own games, something that was also possible on previous Retro Games systems. "We want THEA500 Mini to be an easier plug-and-play alternative to getting out a real Amiga from the loft and setting it up with an old television," continues Chris. "This old hardware can also become increasingly unreliable, which can spoil the fun. THEA500 Mini is an instant on, instant load gaming experience and we're sure seasoned and new users will enjoy playing the fantastic included games. However, if a user already owns a selection of Amiga games then we felt that THEA500 Mini would be even more useful to them if they could play those games as well."

» Chris Smith is full of confidence about Retro Games' new system. "For some users, we're sure THEA500 Mini will replace their current Amiga setup due to its reliability and ease of use."

You'll need a good joypad in order to play those classics and Retro Games has added one, which we're delighted to see looks similar to the Amiga CD32's controller. "We're happy you recognise the similarity," laughs Chris, going on to tell us that this new pad is greatly improved over the original CD32 peripheral. "The CD32 pad was not well-received for various functional and ergonomic reasons," Chris explains, "so we took the styling of the CD32 pad, addressed its ergonomic deficiencies and over many physical prototypes ended up with a very comfortable game controller that looks like it belongs with the Amiga." There's another fantastic touch, which is bound to please those gamers who hated having to press up to jump. "You can map keyboard keys, joystick, CD32 and mouse inputs to any of the game controller buttons through a really nice, easy to use user interface," reveals Chris, something that we feel is an essential inclusion.

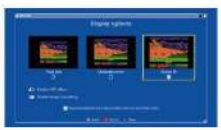
And if you're worried about the emulation behind the system, Chris is confident about that too, revealing many of the technical challenges the team have faced. "The most difficult challenge was creating a hardware platform that would not only provide the power needed to run the Amiga games at their full framerate without tearing at 720p, but which was also a good cost choice," he tells us. "What we've ended up with is a compromise between hardware and software complexity, and a large effort has been spent on optimising the software components to boost performance, which is where the real technical challenges surfaced. Also, a design rule we have is that our products should 'just work', so we try to take the complexity out of things, make things simple and design the user interface to be intuitive, but underneath that perceived simplicity lay a great deal of complexity and effort!"

THEA500 Mini is due for release in early 2022. Expect an in-depth review in a future issue.


Another World
In this cinematic action adventure you are a young scientist fighting for survival after you are accidentally transported to an alien world.
Try to stay alive until you can acquire a weapon. Fail to dodge a hazard and you'll go back to the last checkpoint. You can skip the introduction and use level code EDJI to jump straight into the action.
Save states
Menu: Options
Favourite
Sort
Start Game

» [THEA500 Mini] The presentation is very slick, here's hoping you'll be able to add images of your own games as well.

» If this boxart doesn't get you excited you might need to check your pulse.



» [THEA500 Mini] It's great to see similar screen options to Retro Games' THEC64 Mini.

GAMES, GAMES, GAMES

Here's the currently announced list

- Alien Breed 3D
- Another World
- ATR: All Terrain Racing
- Battle Chess
- Cadaver
- Kick Off 2
- Pinball Dreams
- Simon The Sorcerer
- Speedball 2: Brutal Deluxe
- The Chaos Engine
- Worms: The Director's Cut
- Zool: Ninja Of The 'Nth' Dimension

» Chris promises that the new pad will be greatly improved over the controller it's based on.

» [Amiga] David's idea of adding *Batman* as a pack-in game for the Amiga proved to be a massive Christmas hit.

REVISITING THE PAST

We chat to David Pleasance about his new Commodore book

» David Pleasance released *Commodore: The Inside Story* and now he's ready to release *From Vulture To Vampires.*

David Pleasance will be no stranger to Commodore fans, as he was a prolific figure during the company's Amiga years. The former managing director of Commodore UK was behind the extremely successful *Batman Pack* for the 16-bit computer and published a Kickstarter-funded book in 2020 called *Commodore: The Inside Story,* which effortlessly doubled its original funding goal thanks to over 1,200 loyal backers.

David is back with a brand-new book which promises to be another first-hand account of David's time during the company's final tumultuous years and what happened once the Amiga name was sold off. But what was the reasoning behind David making such a book in the first place? "Because I discovered there was an incredibly intriguing story that needed to be told and that our community was hungry to learn the truth," he told us.

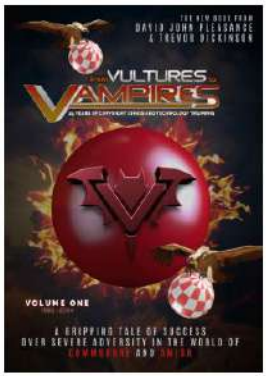
Like *Commodore: The Inside Story,* David's new book *From Vultures To Vampires* is another Kickstarter project, and it's another success, having smashed its £25,000 target by nearly £18,000. David's earlier success meant a second Kickstarter book was an obvious road to travel down. "Having used Kickstarter to raise the funds for *Commodore: The Inside Story* with tremendous success I felt confident that the same system would deliver my target for the new project," David says. "My first book has been received with tremendous acclaim (I have now sold 2,500 copies only through online sales) so this has given me a very willing audience hungry for more factual information being brought into the open."

That new information is based on what was clearly a painful time in David's career and he was keen to explain the origins behind the book's interesting name. "Immediately after the bankruptcy sale in New York (I was there) Colin Proudfoot and I were cheated out of our management buyout attempt," he recalls. "Naturally enough I was battered and bruised and frankly had to get away from the industry as it upset me too much. So after Escom screwed up, and Amiga Technologies were even worse […] it became obvious that the IPs, patents, logos and trademarks were being challenged for and fought over. Some companies and some individuals were not necessarily wanting what was best for the brand, but were clearly after a quick buck. They were like vultures picking away at the carcass of what was left on Commodore/Amiga."

David says it wasn't all bad news and there were many who did want the Amiga name to still mean something after all this time. "Through all this adversity some incredible developers were designing and producing amazing technology including the Apollo team with the marvellous Vampire 4 standalone, which I had demonstrated to me at Gamescom in Cologne. Hence the title *From Vultures To Vampires.*" The book's subtitle of "25 years of copyright chaos and technology triumphs" gives further insight into just what David has planned for his new book.

With *From Vultures To Vampires* promising to expose the companies and individuals that were negative towards the Commodore brand, we were interested to know if David and his co-writer Trevor Dickinson were concerned about upsetting people with the new tell-all book. "Not at all," confirms David, "we are only printing what we have researched and found either online or in print, and wherever possible we have made direct contact with the individuals involved and asked them to comment as from today's

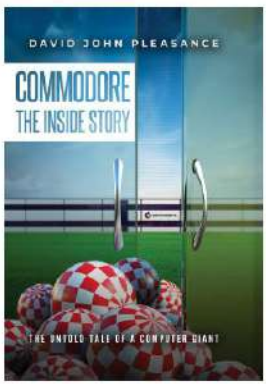
» The Amiga 500 remains one of the most popular computers Commodore ever released. No wonder many are excited by THEA500 Mini.



» *From Vultures To Vampires* is only the first volume. We'd imagine future volumes will also appear on Kickstarter.

» Expect some great promotional images in David's book. Here's Andy Warhol and Debbie Harry at the Amiga's launch.

» *From Vultures To Vampires* covers everything, from the last issue of *CU Amiga* to the birth of Cerebus.



» David's first book was a big success and spurred him on to create a follow-up with Trevor Dickinson.

perspective. Some have, but of course there are some individuals who chose 'no comment'. Make up your own mind what that means."

Unlike David's first book, he now shares a writing credit with Trevor Dickinson. We were keen to know how the collaboration came about and what it means for the book's structure this time around. "Trevor and I have been close friends from our first ever meeting at the Amiga 30 event in Amsterdam 2015 so working with him on this project has been a joy," David tells us. In fact it would appear that Trevor's insight has been rather critical with David revealing, "To be honest, Trevor has contributed the majority of the content, particularly in *Volume 1* (which covers 1995 to 2004) because he was involved with the community throughout all that period, and I was not. I have however been able to get access to some of the individuals who feature in the story."

While *From Vultures To Vampires* largely focuses on the closure of Commodore, David was well aware of a change within the company from when he first joined it. "I joined Commodore in June 1983 and shortly after (March 1984) Jack Tramiel the founder left the company and my belief is that he was the driving force," admits David. "Irving Gould (chairman and major shareholder) had no close interest in the day-to-day management of the business. Its downfall began from that time."

While David and Trevor's book aims to shed light on the issues that have surrounded Commodore since its closure, we were interested to know why he thinks so many companies have struggled to bring back the Amiga for modern audiences. "I am convinced none of the individuals or companies had ever sat down and determined a long-term plan, and they certainly never considered how to generate revenue with all the assets at their disposal," he ponders. "No man plans to fail – he merely fails to plan."

David does believe in the Amiga brand, though, and he was only too happy to explain why he thinks it remains so popular today. "I genuinely believe that Commodore with the C64 and Amiga were current at exactly the right time in history and affected a whole generation of people who were desperate for something new and exciting and fed the hunger that adolescence craved," he concludes. "Now so many from that generation have found themselves in good career positions and can now afford to indulge their nostalgic passions."

From Vultures To Vampires is on sale now from unicornpublishing.org

EVERCADE VS SECRETS

Fans of the Evercade Vs will have something new to look forward to as it was recently revealed that the machine holds a secret within its two cartridge slots. It was announced on Twitter that four additional games will unlock if you use specific cartridge combinations in the two ports. This is a neat little trick and we're hoping that this means the arcade version of *Double Dragon* (which wasn't part of the recent Technos arcade pack) will be one of the included games.

EGRET II MINI'S LINE-UP FINALISED

Taito has revealed the last nine games for its Egret II Mini and it's looking like a must buy. Highlights include *Tatsujin, Darius Gaiden, Arkanoid: Revenge Of Doh, Volfied* and *The Ninja Kids*. The main cab will host 40 games, while the optional paddle controller supports a further ten. Yes it's exceptionally expensive (nearly £300 including shipping for everything) but we're still tremendously excited by it. Here's hoping a UK release gets announced in the future.

Who is Iain Lee?
Iain Lee is a freelance broadcaster who loves gaming, particularly retro gaming. Join him as he hosts a phone-in show and plays games at www.twitch.tv/iainlee and also check out www.patreon.com/iainandKatherine

Beware the pods

There are so many computer game podcasts out there, how do you choose a good one? Well, I am happy to give you my faves. Firstly, *How Did This Get Played?* is a joy and kept me sane during lockdown. Heather, Nick and Matt play terrible and weird games and chat about them. It's really that simple. Sweary, funny and a real joy.

I've tried flirting with the hosts online to try and get an invite but alas, it seems my time on *I'm A Celebrity* stealing strawberries means nothing to those guys. I have given up debasing myself on social media and accepted I shall just have to be a listener. Those guys have standards.

Some people that have zero standards are the hosts of *The Computer Game Show* podcast. It does exactly what is says on the packet. And yes, in a world where most podcasts are middle-aged white men dissecting pop culture, this fits neatly into that rather huge bracket. But, I'm a middle-aged white guy so it is right up my old avenue.

David, Sean, Matt and James talk about news, what they're playing and a load of nonsense that has nothing to do with gaming. I only recently got into it and I love it. The reason I say they have no standards is because my flirting worked and I got an invite on their show. It was quite painful for me as we watched the documentary I made 21 years ago, *Thumb Candy*. I hadn't seen it since it went out and I was dreading it. I'd only done one series of *The 11 O'clock Show* at the time and it was an era when Channel 4 were chucking money at vanity projects. I had no idea how to sound in a documentary.

The first day of filming was in Bristol to meet Toby Gard. I had a piece to camera to do in a dock. I kept trying it and eventually the director, James Bobin, said, "No, that's not it. Try and imagine what a documentary sounds like and do that." So I did, which meant most of the show had a rather overly serious voice.

James went on to direct the recent *Muppet* movies and the *Flight Of The Concords* TV series. To say I'd love a phone call from him offering me even a wordless walk-on part is a slight understatement.

Anyway, *The Computer Game Show* team and I watched it and… it was OK. I wasn't as bad as I remembered. There were some great moments – playing *Space Invaders* with Tomohiro Nishikado and *Mario* with Shigeru Miyamoto. Absolute magic. We were also the first people to find Matt Smith when he'd been off-grid for 20 years.

I came away, as I often do, with a sense of sadness. I'm haunted by missed opportunities and little did that kid know he was about to fall deep into the well of drug addiction. Poor lad.

Three takeaways from the experience. The version on YouTube has at least one major edit in it. Secondly, why were all the pieces to camera filmed in the middle of roads? And thirdly, those *Computer Game Show* lads are bloody brilliant.

Do you agree with Iain's thoughts? Contact us at:

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Who is Paul Rose?
Paul is probably better known as Mr Biffo – the creator of legendary teletext games magazine *Digitiser*. These days, he mostly writes his videogame ramblings over at Digitiser2000.com. If you want more Biffo in your eyes, you can catch him as the host of *Digitizer The Show* at www.bit.ly/biffo2000.

The ultimate adventure?

One of the greatest conveniences of living in this era is being able to fill in gaps from our formative years. For better or worse, with all music, movies, TV and games essentially on tap, over the past decade or so I've been able to return to things I half-remembered, or – better still – those I'd heard about, but never experienced first-hand. Sometimes, this is a mistake.

Plenty of TV shows and games have failed to stand the test of time. The big octopus thing in *Doctor Who*'s *The Power Of Kroll* had been remembered by me as a feat of visual effects on a par with anything CGI could muster.

The reality… not so much.

It has been similar when revisiting many old games. Often, I'll find that modern TVs or computer screens are unkind to graphics from 20-odd years ago (though, weirdly, I find that even earlier graphics, when pixels reigned, stand up better than those formative FMV and polygon days).

But, really, it's the gameplay that sometimes shocks me. In many respects, I've often forgotten entirely how fiddly games were to play back before joypads became ubiquitous. I'll often cite *Skool Daze* as one of my favourite games, but man… 'fiddly' doesn't do it justice.

Plus, why did so many games put up, down, left and right all on the same row on the keyboard? Often on adjacent keys. Just… no! Plus, early joysticks were painfully unresponsive and stiff (stop sniggering at the back).

One series I've really struggled with are Ultimate Play The Game's *Filmation* titles. Yes, they're still beautiful, but they again require insane levels of precision, which is hobbled further still by how slow they play. Especially when there's something moving on your screen other than your character. However, those games remain special. They've got something which still, even now, sets them apart. There's a magic there, despite all the technological limitations.

Unfortunately for me, Ultimate Play The Game has also been responsible for one of my most disappointing revelations.

I'm talking about the games Ultimate released exclusively on the Commodore 64. To wit: the adventures of Sir Arthur Pendragon – *The Staff Of Karnath*, *Entombed*, *Blackwyche* and *Dragon Skulle* – and *Imohotep*, a vaguely Egyptian-themed *Defender* rip-off, that's too harrowing to discuss.

Back in the Eighties, Ultimate was a byword for quality. Its games, for a flawless run of several years, were an event. The C64 releases featured the same iconic cover art and weird spelling choices. We'd come to expect something above and beyond the norm, and seeing those C64-only games on shelves… I assumed my C64-owning brethren were experiencing a whole world of Ultimate goodness that I never would.

I think those games were the only reason I might have ever been tempted to want a Commodore 64.

And yet now, thanks to modern technology, I've finally been able to experience those games. Finally able to fill in the gaps in my gaming knowledge, and fulfil a 35-year dream, and… yeah. Yeah, I was better off not knowing.

You know that thing about 'what you don't know can't hurt you?'. Well, that. Suffice to say, they are not good games. No iconic visuals, or trademark gameplay. Just turgid, lumps of disappointment.

Still, at least I'm able to confirm I made the right call in owning a Speccy.

"They've got something which still, even now, sets them apart. There's a magic there, despite all the technological limitations"

Do you agree with Paul's thoughts? Contact us at:

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Sega Mania

We speak to the creators of the new retro magazine

Fans of retro magazines are well catered for at the moment. *Crash*, *FREEZE64*, *Amiga Addict* and *Ninty Fresh* are just a few of the fine magazines available and now another contender has entered the ring. Editor Tim Hugall, along with Sam Forrester and Simon Pike, explain why they felt the time was right to launch *Sega Mania*.

» Meet the cofounders of *Sega Mania*. Tim Hugall (left) handles editorial, Simon Pike (middle) is a staff writer and researcher, while Sam Forrester (right) shares writing duties with Simon and handles research.

Where did the idea of *Sega Mania* originate?

Tim Hugall: The original idea was a book focused on my personal gaming experiences growing up and Sega was a huge part of that. I love writing but due to family commitments I could never get away with long drawn-out writing sessions. A magazine seemed so much more manageable (I was wrong) and would also be open to collaboration. Although I've worked on many forms of media over the years, they've all been in the digital space and producing something physical that represents my passion for retro gaming has always appealed to me.

Why focus on Sega and not retro systems in general?

TH: Sega was a big part of my childhood, and it makes me sad that they're not the same today as they once were. In the Nineties they were a magical company doing crazy things with risqué advertising and bonkers hardware. Whereas Nintendo were the relatively safe bet, you never quite knew where Sega was going next. We want to try and catalogue some of that energy as a nostalgia trip for older fans and a learning experience for new fans.

Is there a reason why *Sega Mania* focuses on first-hand accounts rather than interview-led articles?

TH: In all honesty it's not how we envisaged the first issue to be, but as complete newbies to the publishing scene we're only just finding our stride when it comes to approaching the right people. The response to issue one has not only been hugely positive, but it's also opened a few doors for us as well and without saying too much we have some exciting interviews coming.

The film section feels rather odd, why include it?

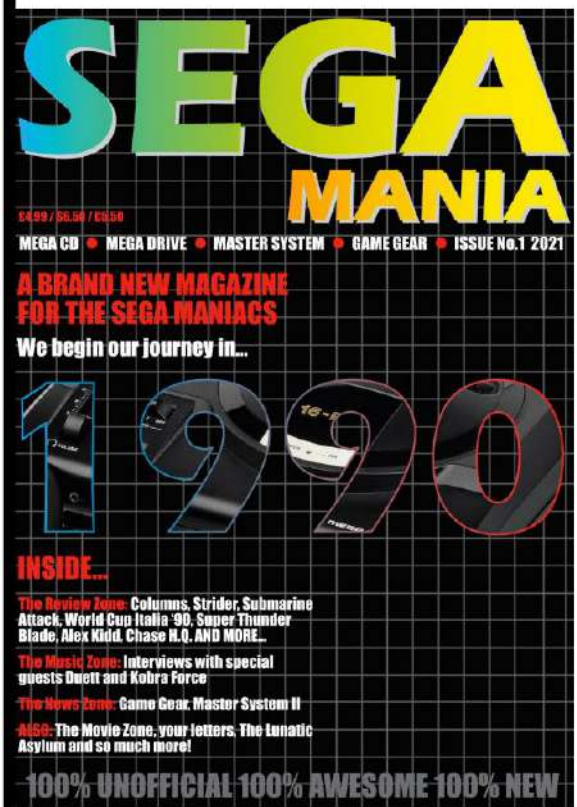
TH: *Sega Power* and other magazines of the era are a big influence and they featured media reviews throughout their run. Not only did we want to emulate this, but we also wanted to get readers into the mindset of how the culture of the era was.

Why did you reissue the original issue you sent out?

TH: There were an enormous number of errors caused by our lack of experience and the pressure of trying to work to a deadline. Also, some content just didn't feel right and we knew we could do better. The Gospel According To Ian Beale for example was me attempting to be funny and it turns out I'm really not funny, so that, along with a few pieces of content, got replaced.

Why have you chosen to focus each issue of the magazine on a single year?

Sam Forrester: It really helps us focus. The Nineties were a very formative time for all of us and there was a lot going on, not just in retro Sega, but popular culture as well. We felt like zeroing in on a specific year would make everything a little more digestible, not just for our readers but for us too!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The News Zone: Game Gear, Master System II
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» Each issue focuses on a single year. Hopefully we'll be visiting the Eighties at some point.

» *Sega Mania*'s News Zone is an interesting mix of news from the past and modern pieces like the latest *Streets Of Rage 4* downloadable content.

» We'd have preferred the film section to focus solely on Sega adaptations, but its context does make sense.

» In addition to covering classic reviews, the team also reviews contemporary games like *Alex Kidd In Miracle World DX*.

TH: Also my favourite section of **Retro Gamer** has always been the Back To The… feature and I wanted *Sega Mania* to be a whole magazine in that style.

Why re-review classic games?

Simon Pike: One of the aims of the magazine was to really give readers that Nineties nostalgia hit, and Nineties magazines were chock full of reviews. We know that our readers will already have a fully formed opinion on most of the games covered, but we're hoping that our reviews will be entertaining, offer a different perspective and possibly even spark debate.

Is Sega Mania a full-time job?

TH: Hopefully we will grow to a point where we can look at doing the magazine full-time but for now it's a pure passion project. We all have full-time jobs and families and without going into too much detail we make no profit from sales of the mag, but for us it's not and never will be about making money.

Have you found it difficult sourcing interviews?

SF: It's been one of the most fun parts. There is no shortage of interesting people to reach out to: musicians, collectors, even a guy who built a coffee table shaped like a Master System controller. The people we are aiming the magazine at, as well as the people we speak to, are a wonderfully colourful bunch and what ties them – and us – together is a burning passion for the kind of things we're writing about.

Are you pleased with the strong support from advertisers?

SP: We wanted real advertisements in issue one to give the magazine that air of legitimacy, and so we reached out to a few entities who might be interested in getting a free advert. The *Amiga Addict* one is displayed proudly as a thank you for all the help the team offered us, and the Chillout Games one really fits the visual style of the mag. TripleJump are my favourite YouTube gaming channel so I was really happy when they replied to my speculative email and were keen on the project. I'm very chuffed to have them in there.

» A double-page spread of *Strider* is one way to get Darran's attention. He's also partial to articles about birds.

What advice would you give to anyone planning a similar project?

TH: It's tough and there's a huge amount to learn but if you have a good team and a lot of passion it's well worth giving it a go. Although some of us have a background in media, none of us have done anything like this before from scratch and it has been challenging but rewarding. Support from the community and other similar projects is key and staff from *Amiga Addict*, and E1M1 to name but a few have been a great help to us. We have our own Discord server and we welcome anyone thinking about self-publishing to have a chat with us if they'd like some advice.

Where do you see *Sega Mania* in five years?

TH: The dream is to be on store shelves. This has all been one big exercise in nostalgia and we'd love nothing more than to put Oasis on the Walkman, skateboard down to WHSmith and pick up a can of Tizer and a copy of *Sega Mania*.

BACK TO THE NOUGHTIES

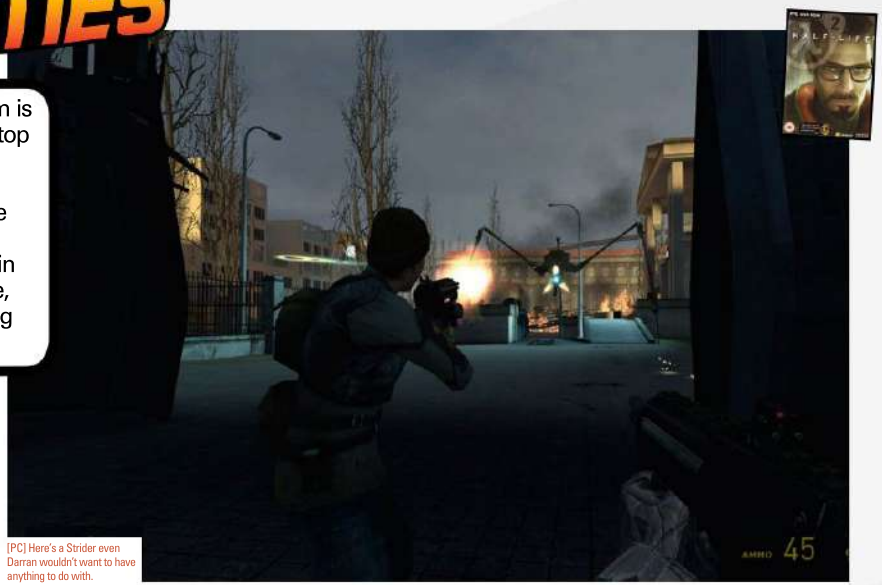
NOVEMBER 2004 – Acclaim is no more, Half-Life 2 gets a top score, the big football rivals don't draw, and American retailers can barely keep the DS on the shop floor. Let's take another trip back in time with Nick Thorpe, who is rapidly running out of 2004 to revisit

NEWS NOVEMBER 2004

The United States held its presidential election on 2 November, with the Democratic challenger John Kerry attempting to unseat the incumbent Republican George W Bush. The dominant issue during the campaign was foreign policy – Bush argued that the wars in Iraq and Afghanistan were vital for national security reasons, while Kerry felt that they had damaged America's international reputation. The president's message was the one that cut through the noise, as both the popular vote and electoral college vote were won by Bush, giving him a second and final term.

On 18 November, after years of attempts by the Labour government to ban fox hunting in England and Wales, the Hunting Act 2004 became law. The bill and previous ones like it had consistently gained the support of MPs in the House Of Commons, but had been delayed and diluted by peers in the House Of Lords. Ultimately, Commons speaker Michael Martin was forced to invoke the Parliament Act to bypass the Lords and prioritise the wishes of elected MPs.

Ken Jennings, a contestant who had won an unprecedented 74 episodes of the American game show Jeopardy!, was finally defeated on 30 November by Nancy Zerg. Jennings won over $2.5 million during his time on the show, and his winning streak increased ratings by 22%.



[PC] Here's a Strider even Darran wouldn't want to have anything to do with.

THE LATEST NEWS FROM NOVEMBER 2004

We start this month with some turmoil, as the publisher and developer Acclaim officially kicked the bucket, filing for Chapter 7 bankruptcy in the USA. Acclaim had been one of gaming's most successful publishers during the Nineties, building its fortune primarily via licensed properties, including TV shows like *The Simpsons* and the World Wrestling Federation and arcade conversions such as *NBA Jam* and *Mortal Kombat 3*. While there were undoubtedly some great releases in its final years, including *Burnout 2: Point Of Impact*, Acclaim was mostly known for lacklustre games and controversial marketing stunts. Plenty of studios and projects were impacted, including *Juiced*, the racer by the former Rage Warrington developers at Juice Games. "The situation is not as bad this time because we aren't owned by Acclaim," project manager Richard Badger told *Official Xbox Magazine*. "I still reckon there could be up to a three-month delay while we sort out a new publisher for *Juiced*." Other projects thrown into disarray included comic-book shoot-'em-up *The Red Star*, which was basically finished, as well as *Interview With A Made Man*, *Emergency Mayhem* and *100 Bullets*.

[PC] The scale of the clashes featured in *Rome: Total War* was quite extraordinary – just look at all those guys.

[PS2] *Edge* described *Battlefront* as being like playing with *Star Wars* toys, and that's a good way of putting it.

This month, the PC was very much the place to be for top quality gaming, with *PC Gamer* coaxed into giving out two uncharacteristically high review scores. After delays that had felt unbearable, Valve had finally delivered *Half-Life 2*, and it was truly brilliant. "This is a joyous, kinetic action game. The concussive sound effects, combined with the physical solidity of weapons, objects, enemies and environment, make this a shocking experience," wrote Jim Rossignol, who was full of praise for the visuals, physics engine and immersive storytelling. "Sell your grandmother, remortgage the cat, do whatever you have to do. Just don't miss out," he concluded, awarding the game 96%. At the other end of the action scale, the real-time strategy sequel *Rome: Total War* earned 95%. Ross Atherton was impressed with tactical depth that ensured "the richest and biggest armies don't always win", and praised the game for its "balance, immediacy and … atmosphere".

With the holidays fast approaching, the big boys were rolling out the big games on consoles, leading to

[PS2] Ludacris said "let's go to the subway" and this buffoon thought he was about to get a free lunch.

[GameCube] There's stuff happening on the GameCube too, honest – it just all got reviewed on import months ago.

[Xbox] Fortunately, the funding model for *Juiced* meant that Juice Games retained ownership of the game after Acclaim's collapse.

some packed review sections. The great football rivalry was back on, as Konami and EA released their latest annual instalments in their respective series, and Konami took victory. *Pro Evolution Soccer* scored 10/10 in *Official PlayStation 2 Magazine* and 9.4/10 in *Official Xbox Magazine*, with the former claiming that "the quality of the football can't be faulted", but complaining that "British teams haven't been signed up". *FIFA* earned scores of 8/10 from *Official PlayStation 2 Magazine* and 8.9/10 from *Official Xbox Magazine*, as well as 75% from *NGC*, which felt the game was "basically the same game" as the previous version. Of course, GameCube owners were something of a captive audience given *Pro Evo*'s absence from the platform.

Fortunately for EA, its other major multiplatform releases didn't have such direct competition. The epic combat of *Star Wars: Battlefront* earned a warm reception, with *Edge* noting that, "Everything does just what it's meant to: all vehicles can be piloted, from speeder bikes to giant assault units, and the waves of soldiers give the impression of large-scale battles." That earned it 8/10, alongside scores of 82% from *GamesMaster*, 7/10 from the *Official PlayStation 2 Magazine* and 9.0/10 from *Official Xbox Magazine*. The combination of beats and brawling in *Def Jam: Fight For New York* also drew praise, earning 8/10 from *Official PS2 Magazine*, 8.9/10 from *Official Xbox Magazine* and 85% from *GamesMaster*.

Elsewhere this month, the licensed boxing sequel *Rocky Legends* (6/10 *Edge*, 8/10 *OPS2M*, 8.6/10 *OXM*) came out swinging, *Colin McRae Rally 2005* (6/10 *Edge*, 90% *GM*, 87% *PC Gamer*) did another lap, and the high school horror *Obscure* (7/10 *OPS2M*, 7.8/10 *OXM*, 74% *GM*) failed to knock the critics dead. Annual EA Sports releases *Madden NFL 2005* (86% *NGC*, 9/10 *OPS2M*, 89% *GM*) and *NHL 2005* (80% *NGC*, 7/10 *OPS2M*, 8.9/10 *OXM*) continued to be dependable. The GameCube exclusives *Donkey Konga* (88% *NGC*) and *Pikmin 2* (92% *NGC*, 92% *GM*) also finally received their UK releases, and the alternative sports classic *Ribbit King* (45% *NGC*) was surprisingly slated. GBA owners got nothing but disappointment, with the 60% awarded to *WWE Survivor Series* being NGC's best handheld score of the month.

Lastly, the Nintendo DS launched in North America on 21 November, officially kicking off a new generation of handheld gaming. Demand was very strong, with preorders selling out the same day they opened, but no import games had managed to make their way into the hands of the UK's games press. So join us again next time, as the PSP launches, the silly season kicks in and we have to try to find a way to cram everything into just two pages.

CHARTS

NOVEMBER 2004

PLAYSTATION 2

1 – Burnout 3: Takedown (EA)
2 – Conflict: Vietnam (SCI)
3 – Shellshock: Nam '67 (Eidos)
4 – Second Sight (Codemasters)
5 – Spider-Man 2 (Activision)

XBOX

1 – Burnout 3: Takedown (EA)
2 – Conflict: Vietnam (SCI)
3 – Shellshock: Nam '67 (Eidos)
4 – Second Sight (Codemasters)
5 – The Chronicles Of Riddick (Vivendi)

PC

1 – Doom 3 (Activision)
2 – Championship Manager 03/04 (Eidos)
3 – The Sims: Triple Deluxe (EA)
4 – Shellshock: Nam '67 (Eidos)
5 – CSI: Dark Motives (Ubisoft)

MUSIC

1 – Vertigo (U2)
2 – Lose My Breath (Destiny's Child)
3 – Just Lose It (Eminem)
4 – Curtain Falls (Blue)
5 – Confessions Part II/My Boo (Usher)

THIS MONTH IN...

PC Gamer

"Wargames are tourism. You play them to experience the sights and sounds of conflict," argues Tim Edwards. "The reason games of [the Vietnam war] appear so trivial is because they continually shy away from the reality, instead presenting a sanitised view. Where are the playable documentaries? Where's the polemic? Where's the gore?"

Edge

Doom 3 is "merely okay" and *The Chronicles Of Riddick* is "unqualified rubbish", as are *Knights Of The Old Republic* and *Red Dead Revolver*. Mr Biffo is fed up with other people's opinions, and in future plans to, "Spend the money I would've spent on a games magazine to rent out a couple of games for two nights, and make up my own mind."

NGC

Nintendo Europe's product manager Marko Hein is asked if the Game Boy Advance will be phased out in favour of the newly launched DS. "DS is not a substitute for the GBA and it's not a follow-up," he claims. "It might confuse our customers a little bit, as DS could be perceived as the next Game Boy. But we want to go in a new direction here."

1ST
9300
HI SCORE
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Cheeky Mouse

OF MICE AND MEN

» Arcade » 1980 » Universal

***Cheeky Mouse* – which really ought to be called *Cheeky Giant Rat*, as your adversaries are almost man-size – casts you as a handyman defending his precious stash of cheese from a very hungry nest of mice.** It must be vintage cheddar as for some reason you have stored it all in the cellar, which means the rodent horde must gnaw through the floorboards to gain access, giving you time to clobber them with your massive mallet. This really is pest control at its most basic and brutal.

Things get pretty hectic after half a dozen levels, as your view of the descending vermin is obscured by an increasing number of windows and, rather incongruously, aliens also join the fray. There's something very satisfying about splattering a mouse just before it escapes with your cheese, giving you double points and forcing them to regurgitate their ill-nibbled gains.

The game is a glorious reminder of that time at the start of the Eighties when game concepts and odd mechanics were being pioneered and I wonder if Shigeru Miyamoto noted the simple joy of crushing stuff with a giant hammer and incorporated it into *Donkey Kong*, released the following year?

I don't remember the game from back then but have fond memories of first seeing it as part of the annual Funspot tournament in 2006. The event, held inside the American Classic Arcade Museum in New Hampshire, USA, attracted the cream of the high-scoring community. Watching world-class players reduced to frantic button mashing and cursing the inclusion of such an obscurity in the competition was entertaining and the game was soon rechristened 'Fucking Mouse'.

If I ever get to own an original cabinet, I'm getting a custom marquee made.

INSIDE THE NINTEN

FOR A TIME IN THE LATE-NINETIES, NINTENDO BOASTED OF HAVING "THE FASTEST, MOST POWERFUL GAMES CONSOLE IN THE WORLD", AND REVOLUTIONARY 3D GAMES TO RUN ON IT. BUT WHAT MADE THIS POWERHOUSE TICK? WITH THE HELP OF VETERAN DEVELOPERS, WE DELVE INTO THE MACHINE TO FIND OUT

WORDS BY NICK THORPE

In 1993, Nintendo was a company in an interesting position. While it was undoubtedly a leader in the videogame console market, it could no longer boast the virtual monopoly it held during the late-Eighties. What's more, the industry was already planning to transition away from the 16-bit console market, and rival manufacturers were beginning to show their hands. NEC had experienced success in Japan with the PC Engine, and had already shown off the 32-bit Tetsujin, while Atari had announced the Jaguar in August 1993 and was gearing up for a holiday test launch. The much vaunted 3DO, from former Electronic Arts executive Trip Hawkins, was also scheduled to launch for the holiday season and had the backing of electronics giant Panasonic.

Nintendo wasn't particularly concerned with most of these companies – at the time, Sega was its biggest rival, having been the first company to bring serious competition to the console market. As the two biggest players in the console market, either of them could have been behind what ultimately became the Nintendo 64. The hardware was primarily engineered by Silicon Graphics, Inc, a huge name in movie special effects technology which had recently bought MIPS Technologies, the designer of the CPUs used in its workstations. Having developed a low cost, power-efficient version of the latest MIPS processors, SGI put together a design proposal for a games console. In September 1993, the rivals had signed the contracts and made their announcements – Nintendo would partner with SGI and launch its 64-bit home console in late-1995, while Sega would use Hitachi's 32-bit processors and launch in the autumn of 1994. Sony, Nintendo's former partner on the SNES CD-ROM project, announced its intention to launch a home console of its own the following month.

Being the last to market wasn't an unfamiliar situation for Nintendo, as it had done the same with the SNES and been able to retain a substantial market share regardless. The tactic here was the same – simply put, Nintendo bet on having the best technology. Project Reality, as it soon became known, was also an easy machine to hype. With SGI on board, *Nintendo Magazine System* claimed that the machine had "the potential to provide graphic images such as those seen in *Abyss, Jurassic Park* and *Terminator 2*". At a time when more bits was better, being a 64-bit machine was a big deal. *Total* emphasised that "[Sega's] next generation machine, Saturn, is a 32-bit console – fairly powerful, but nowhere near as fast as the Silicon Graphics hardware". By the time the console had received its Ultra 64 name in 1994, Nintendo had decided on an extensive advance marketing strategy, working with Midway to create Ultra 64 branded arcade games and taking out advertising to encourage players to wait for the console. They needed plenty of patience, as the Nintendo 64 was delayed repeatedly prior to its Japanese release in June 1996. "It's hard to do hardware full stop, and this was a totally new platform – new chipset, new CPU, new GPU. On top of that, we were trying to make a flagship *Mario* game," says Giles Goddard, a programmer working for Nintendo at that time. "They just wanted to get it right – there was no particular big problem that happened that caused a delay or anything."

While working on the planned launch game *Star Wars: Shadows Of The Empire*, Eric Johnston had a privileged ▶

» [N64] Giles Goddard was able to create an animation system for *1080° Snowboarding* that moved between motions smoothly.

DO 64®

NINTENDO 64

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INTERVIEWEES

JES BICKHAM
Reviews editor – *N64 Magazine*

ED BRYAN
Artist – *Banjo-Kazooie, Banjo-Tooie*

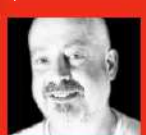
MATT FURNISS
Musician – *Cruis'n Exotica, Excitebike 64*

CHRIS SUTHERLAND
Programmer – *Banjo-Kazooie, Banjo-Tooie*

STEVE MAYLES
Artist – *Banjo-Kazooie, Banjo-Tooie*

LEE SCHUNEMAN
Director – *Diddy Kong Racing, Dinosaur Planet*

ERIC JOHNSTON
Technical/project leader – *Star Wars: Shadows Of The Empire, Star Wars Episode I: Racer*



MARK STEVENSON
Artist – *Donkey Kong 64*

AMIR LATIF
Programmer – *Wetrix, Mario Artist: Paint Studio*

GILES GODDARD
Programmer – *Super Mario 64, 1080° Snowboarding*

» [N64] We can only imagine how *Star Wars Episode I: Racer* would have run with the 2MB RAM originally proposed.

» [N64] If used over too large an area, bilinear interpolation can make textures look blurry and indistinct.

» [N64] Games like *Banjo-Kazooie* featured large 3D worlds that other consoles struggled to replicate.

position in seeing the system take shape. "I loved the N64 hardware. Mark Blattel and I had a desk at SGI during its development, running it through its paces as it progressed. At the time, the only machine we could simulate it on was a $250,000 SGI Onyx, which was a purple and black box the size of a small desk, which required its own 16-amp power outlet," he tells us. Giles also remembers this setup. "There were changes all the time basically, we rarely saw actual hardware. There were two levels of emulation – the API side emulation where you could recompile your game to run on SGI hardware natively, with very little changes to your code you could run either the native one or build it for the emulator. Most of the time we were developing on the native version of the game, and then occasionally we'd recompile it for the Onyx to see if it still worked in the same way. We rarely saw actual N64 devices."

[N64] Lee Schuneman and the *Diddy Kong Racing* team had ideas first and worried about hardware limitations later.

The CPU was quite powerful for its day, with a high clock speed of 93.75MHz for a performance of 125 million instructions per second – for comparison, the PlayStation does around 30 MIPS. But did the ability to use 64-bit processing actually provide any practical advantages? "Almost none, I would say," says Giles. "I'd say it was more of a marketing thing than anything actually usable. A float is 32 bits and a double float is 64 bits, and you don't need double floats to do any kind of 3D maths usually, especially back then. All games ran in 32-bit mode. 32 bits is what, 4GB of memory? This thing only had 4MB," he explains. "From memory, I think the 64 bits was more marketing spiel than anything else," concurs Amir Latif. "It certainly didn't have a huge amount of RAM to access and the memory bus certainly wasn't that wide. There was a 32-bit mode and a 64-bit mode, but in reality we never really touched the 64-bit mode as there were other knock-on effects (for example, pointers become eight bytes instead of four)."

"There were lots of new things that were being thrown at us that we had to familiarise ourselves with," says Chris Sutherland. "We were previously used to coding things in assembly language, so depending on the processor we were using, whether it was for the Game Boy, the NES or the SNES we'd be familiarising ourselves with that processor. So I suppose it was a bit of a leap in terms of moving from assembly language to C, where we were programming on a higher level language. There were lots of things to consider there, and lots of new things to learn," he explains. "There was a move to three dimensions as well, which is something that we weren't familiar with, learning things with cameras and things like that. We were also using different machines, so previously we would be using PCs to develop with, and now we were using these Silicon Graphics Indys which didn't run Windows, but they ran a version of a Unix-style operating system."

One unique thing about the N64 was the Reality Co-Processor, or the RCP. Although this chip handled the console's graphical functions, that wasn't its only task – it was also used for audio and input/output operations. The RCP could be reconfigured towards different performance profiles using custom microcode, and it had plenty of hardware features that were key to the N64's distinct look. "In particular, I liked having built-in Z-buffer, trilinear mipmapping and floating point. Today, few 3D game developers would even *consider* going without these, but at the time they were new, and didn't exist on other platforms at all, even expensive home PCs," says Eric. "If you run N64 games side by side with other

FRANCHISE FORWARD

SUPER MARIO 64

Nintendo did away with the largely linear obstacle courses of past games and came up with an incredible new template for Mario, creating 3D spaces that each felt like self-contained playgrounds. Each stage featured multiple goals due to the various Power Stars on offer, maximising the need to explore all of them thoroughly.

MARIO KART 64

Freed from the flat tracks necessitated by the Mode 7 feature of the SNES, Nintendo was able to introduce courses with bumps and jumps, as well as more creative hazards including boulders tumbling down cliffs. Even Battle Mode benefitted, with Green Shells being far more lethal at the lower levels of Block Fortress than the top.

ZELDA: OCARINA OF TIME

Combat in 2D *Zelda* games had to compensate for the player's four directions of movement, but 3D had to replace the reliable top-down viewpoint. The genius Z-targeting system allowed players to lock the camera to a single enemy and move relative to it, while you could see through Link's eyes to aim both the slingshot and the bow.

STAR FOX 64

Star Fox 64 offered few gigantic gameplay innovations, due to the fact that its predecessor was one of the rare 3D games for the SNES. What it did have was a massive increase in graphical detail, environmental complexity and framerate, as well as a good use for the controller expansion port with the introduction of the Rumble Pak.

contemporary platforms, you definitely notice the difference visually." Amir also remembers this visual difference. "In terms of pixel fidelity, the N64 had fairly cutting-edge features, especially compared to its PlayStation peer. Z-buffering, anti-aliasing, bilinear interpolation texturing, perspective corrected texturing, mipmap texturing, environment mapping, fog, all of these features were missing from its competitors. Unfortunately, they also came at a heavy price and the N64 really struggled to throw around too many triangles, especially with some of those heavier effects turned on."

Rare struggled with the performance balance in its early work with the machine. "There were all kinds of convoluted systems that we had to try and not use that Z-buffer, so it was sorting by object and all this kind of stuff, which always works to 80% but then there's the 20% where things draw in the wrong order. There were all kinds of things we tried to mitigate that, but in the end we settled on 'let's use the Z-buffer,'" Ed Bryan recalls. "The Z-buffer was seen as extremely expensive in terms of framerate, but you couldn't do without it as we found out," adds Steve Mayles. "But this wasn't on *Banjo*, this was when we were doing the *Dream* game," he says, referring to the precursor to *Banjo-Kazooie*. "You'd be walking across a bridge and it would all look great, then you'd move the camera slightly and then this massive thing would pop in front of everyone."

Despite being industry leaders in 3D art thanks to games like *Donkey Kong Country* and *Killer Instinct*, Rare's artists also found that they needed to learn a new way of working for the new console. "With NURBS, the way we did the 3D for *Donkey Kong Country*, it was completely different to polygons so it was really another world of 3D with the triangles and the vertices," says Steve. "There were more rules to follow really, because it was real-time. With the NURBS, you were making it and rendering it out, and at that point it didn't really matter what it looked like in the package, but with the polygons everything had to be done exactly right, or else it'd go into the game and it'd all go wrong." However, the NURBS experience didn't go to waste, as it was used to create textures – though they were their own challenge. "Colouring everything a vertex at a time, texturing everything a triangle at a time – it was a very different world to what it is now," says Ed. "We opted for as few textures on the characters as possible," he remembers. "Which actually works well in retrospect, because if you have that shading, then if you have a modern version which upscales it, it looks kind of neat still, whereas if you have a texture it just gets really blurred out," Chris adds.

The system's approach to memory followed a similarly flexible model to the co-processor. Previous consoles had allocated various pools of RAM to different tasks – main memory, video and audio. The N64 used a unified memory architecture, allowing developers to distribute the system's 4MB memory between tasks as they saw fit. "Up until that point everybody had to deal with banks and DMA memory between banks, and that was a real pain to do that kind of stuff. Now we had basically everything under one roof, which was just fantastic," says Giles. "You basically had three areas. You had the ROM, you had the RAM, and then you had the graphics memory – and when I say memory I mean texture memory and vertex memory. So you still had a graphics part of the memory that was separate – it was on-chip cache, but it was great to have everything in RAM – you could access anything, anywhere, without having to worry about what area it was. That was one of the big attractions

HOW EXISTING GAMING SERIES ADJUSTED TO THE NEW POSSIBILITIES OF THE N64

POKÉMON STADIUM

As great as the handheld *Pokémon* games were, the battles didn't look hugely impressive to kids that had been hooked on the anime series. *Pokémon Stadium*'s 3D renditions of the popular critters were imported from your Game Boy cart and had all the charm of their cartoon counterparts, plus some dramatic attack animations to match.

GOLDENEYE 007

Prior *Bond* games had hardly been classics, so Rare's shooter was a revelation. The first-person 3D action allowed players to mentally slip into the super spy's tuxedo, while the four control ports allowed you and your friends to see who'd win between Jaws, Oddjob, Baron Samedi and May Day. Spoiler: it's Oddjob, 90% of the time.

DONKEY KONG 64

Although they were finally gifted with a 3D world to go with their 3D appearance, the Kong clan's most noticeable upgrade of the N64 era arguably came in the audio department. There's no way the *DK Rap* would sound the same coming out of a SNES, and it's definitely something you'll never be able to forget once you've heard it.

Inside The THE OTHER N64S

WHAT'S THE TRUTH BEHIND THE ARCADE ULTRA 64 GAMES?

If you were a regular arcade visitor in the mid-Nineties, it's very likely that your first glimpse of the eagerly anticipated Ultra 64 took place there. Rare's *Killer Instinct* and Midway's *Cruis'n USA* were both released in 1994, and each game proudly trumpeted the fact that it ran on the technology that would power Nintendo's new console. Just a few years earlier, the Neo Geo had been arcade perfect but prohibitively expensive – could it really be true that this cutting-edge arcade hardware would be coming home at an affordable price?

To put it bluntly, no. Despite sporting some prominent Ultra 64 branding in its attract mode as well as Nintendo logos elsewhere, the Midway V-Unit hardware that ran *Cruis'n USA* employed a Texas Instruments CPU and a custom 3D chip, and essentially bears no resemblance to the console that SGI would produce for Nintendo. This was actually public knowledge soon after the game was launched, too – *GamePro*'s December 1994 issue reported "according to NOA, *Cruis'n USA* was actually programmed by Williams Entertainment before Ultra 64 development tools were available". While the eventual N64 conversion does look fairly similar in many ways, it suffers from a lower resolution and less stable framerate.

That same issue of *GamePro* noted that the only developer in the world with Ultra 64 development tools was Rare. *Killer Instinct*'s attract mode claimed that it would be "available for your home in 1995, only on Nintendo Ultra 64", but this also proved to be somewhat wide of the mark. In this case though, there was a little more truth to the claims. *Killer Instinct*'s arcade board did employ a MIPS R4600 CPU, a relative of the R4300i used in the N64. However, it didn't have anything like the N64's RCP co-processor, and it used a hard disk – something the home machine never had access to. The game was converted to the SNES and Game Boy due to the late arrival of the N64, and *Killer Instinct 2* arrived in the arcades before *Killer Instinct Gold* finally arrived on the N64 in 1997.

for that kind of architecture." Although the N64's memory architecture was not especially fast, Giles doesn't recall this being an issue. "It was more the size of the caches that was the problem, they were quite small. It was 4K for the textures and I think something really stupid like 16 vertices. That's where triangle stripping and all these sort of clever ways of getting the most amount of triangles out of fewer vertices was really important."

Another unusual aspect of the RAM was the ninth bit reserved for graphical functions – something Eric was keen to exploit in other ways. "You might know that the original in-development architecture was only 2 or 2.5MB RAM, all 9-bit DRAM. The CPU only had access to it as eight bits per byte, so I wrote a sketchy driver to (at some hiccup cost) use the ninth bit as extra memory. I mean hey, that's an extra 280K or so, minus what the frame buffers need – enough for some cached textures or sounds," he explains. "I proudly showed it off to Acorn, a super-cool ace developer at Nintendo. Some time later, after they'd upped the memory to 4MB I got an email saying you're welcome and *pleeease* don't use the ninth bit hack job in a shipping game." Though Eric's hack never saw the light of day, it was possibly for the best. "The RCP made really nice use of the ninth bit though, for extra Z-buffer resolution and 5553 RGB+ coverage for their clever and imperfect anti-aliasing, in a world where supersampling wasn't an option," he tells us.

» [N64] Giles Goddard put together Mario's interactive face in about two months. For many, its impact lasted far longer.

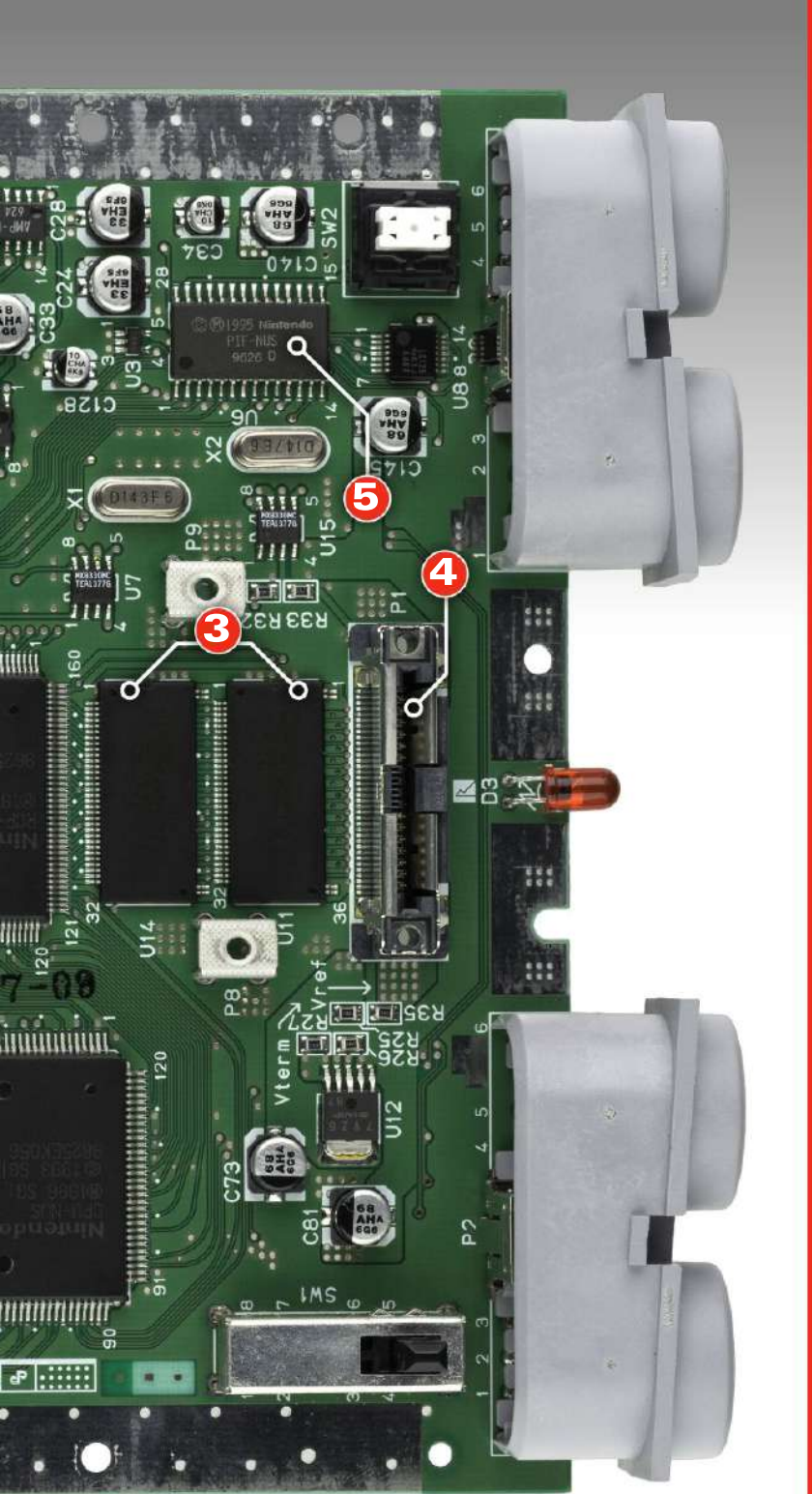
» [N64] Far fewer players would have been able to enjoy *Super Smash Bros* properly without the system's four control ports.

» [N64] Unable to display long entrance video clips, *WWF No Mercy* used slideshows before cutting to the ramp.

When it came to sound, the N64 used the CPU and RCP to play back sound samples. While it offered a major jump over what was possible on the SNES, it had some major disadvantages compared to its competitors. "N64 has more RAM available for the audio processor, and it can load data much faster from ROM than a PlayStation can from CD," explains veteran videogame musician Matt Furniss. "Most PlayStation games had CD soundtracks leaving all the available audio RAM for sound effects, whereas N64 had to generate both music *and* sound effects. So in the end PlayStation sounds better – more sound effects, higher sample rates. But N64 music could be more dynamic and seamlessly change during gameplay." The flexibility of the system allowed for a variety of approaches. "*Cruis'n Exotica* uses very large single-channel samples, compressed down from the original arcade game. For *Excitebike 64* we used dual-channel audio stems which would allow a little more variety in each song," Matt explains. However, he was rather fortunate to be able to do so. "Both games I worked on had large cartridge ROMs. Enough space to store all the music and effects at a sample rate and compression which sounded decent." When asked how much space that took, he draws a blank, but tells us "it must have been more than most games, it was unusual to handle the music as we did".

» [N64] Though N64 games looked very solid thanks to hardware-supported effects, they could sometimes suffer from low framerates.

Even then, large samples could only take you so far – for example, *Tony Hawk's Pro Skater 2* on the N64 has a reduced selection of songs, each



NINTENDO 64

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UNDER THE HOOD

A CLOSER LOOK AT THE N64 MOTHERBOARD

1 CPU-NUS

This is the N64's CPU, a MIPS R4300i clocked at 93.75 MHz. It uses the MIPS III architecture and is capable of performing both 32-bit and 64-bit operations. There is also a floating point unit included as part of the chip.

2 RCP-NUS

This is the Reality Co-Processor, which contains the Reality Signal Processor and Reality Display Processor. It is primarily responsible for producing the graphics and sound of N64 games. It also handles input/output operations.

3 RDRAM

The system's memory, totalling 4.5MB and connected to the RCP via a 9-bit bus. Most of the system cannot access the last 512KB, with the ninth bit only accessible by the GPU for purposes such as extra Z-buffer resolution.

4 RAM EXPANSION PORT

By default, a Jumper Pak is fitted here to terminate the RAM bus, but an additional 4.5MB RDRAM can be added via the Expansion Pak. If neither unit is present, the system will completely fail to boot, showing a blank screen.

5 PIF-NUS

The Peripheral Interface is attached to the RCP and handles inputs from controllers and connected accessories. It is also the chip that communicates with the CIC security chip in each cartridge for piracy prevention and region locking.

DOWN TO THE WIRE

BREAKING DOWN GRAPHICAL ELEMENTS OF A FAMOUS N64 SCENE

BEHIND THE DOORS

1 There's nothing visible behind the doors, because each room is loaded only when Mario is within touching distance – useful for keeping RAM usage in check. These extra images (below right) show just how close he needs to get.

RAILING

2 This decorative feature is a great example of doing a lot with a little – it's drawn using just two triangles and a 32x32 texture, repeated across the entire length of them. It looks detailed but uses few resources.

SUN TEXTURE

3 In the wireframe model, you can see that this is made up of eight triangles arranged into a square shape. The texture is symmetrical, so only a quarter of it is stored, and the rest is drawn by flipping and mirroring it.

COIN

4 Fully modelled coins would be a waste of resources, so they're represented with pre-rendered sprites. The texture is stored in greyscale, and is coloured as the game needs to represent Yellow, Red and Blue Coins.

MARIO'S BODY

5 Our hero gets the most generous polygon count in the scene, comfortably exceeding anything else. Most of his model is made up of simple shaded polygons, but his eyes, hair or clothing details are added as textures.

of which are formed of long repeating samples. More commonly, developers would construct music from short samples of instruments, as was done on the SNES – *Resident Evil 2* does this. But the use of cartridges was a problem for more than sound. The CD-ROMs adopted by Sony and Sega had the downside of slow loading and being easier to copy, but allowed for plenty of presentational fluff such as FMV sequences and extensive voice acting. Some developers, most notably Squaresoft, found that sticking with ROM cartridges simply represented too great a constraint on their ambitions, and moved to rival platforms. Other publishers were attracted by the low manufacturing cost of CDs, allowing them to manufacture games at less financial risk, as well as potentially offering them at a lower price.

» [N64] *Excitebike 64*'s music was atypical in its use of the N64's audio capabilities, according to Matt Furniss.

Beyond the console's internals, innovation was extended to the interface of the system. The console came with four control ports as standard, making larger multiplayer games the norm – a simple change that made classics of games like *GoldenEye 007* and *Mario Kart 64*. More radical was its unusual, three-pronged controller. The central analogue thumbstick provided fine control over direction and speed of movement, while the quartet of C-buttons was designed for 3D camera control and the Z trigger provided a substitute for L/R depending on your grip. "Having had the privilege to work very closely with key Nintendo leaders, I got to learn from them and understand their focus on playful and surprising interactions and then the functional and simple way the hardware enables it," says Lee Schuneman. "It's a controller designed with both an eye to the future (3D) and connection to the past (2D) with an understanding that players and developers need time to get used to the change that was coming as 3D worlds became the norm. The reality is that the concepts from it remain to this day in *all* controllers. I always like that Nintendo walk their own path and design hardware to enable the games, not the other way around. It's never tech for tech's sake."

Of course, for all of its technical grunt, the N64 was defined as much by the talent of those developing for it as the system specifications. The special effects of *Super Mario 64* that made the console look a step ahead of anything else were as much a showcase of ingenuity as technology. "I think a lot of the stuff we were doing was made to highlight the hardware – it wouldn't look the same on a PlayStation," says Giles. "It was Nintendo, so they obviously had a lot of know-how, a lot of willingness to experiment with ideas without having to worry about going over budget too much. It was a bit of both – the artists at Nintendo are amazing, the programmers are amazing. It was the combination of having great hardware and a great team."

"I have never approached any game development thinking about the hardware, it's always what's the idea and let's do everything we can to make it real," says Lee. "Of course along the way you discover things that maybe you can or can't do but then you find a solution around it! Rare was (and I'm sure still is) full of great software engineers who were never satisfied with any limitation, so hardware weaknesses were never a problem and just something to work around." Mostly, he remembers the people over the hardware. "The amount of world-class game designers (Miyamoto, Iwata, Ken Lobb, all the Rare founders) that I got to interact with over those N64 years was pretty amazing in hindsight, and even a prerelease *Ocarina Of Time* to learn from."

As the N64 aged, there were a couple of attempts at expanding its capabilities. The 64DD was a disk drive that used proprietary magnetic disks with a 64MB capacity and some capability to save data. This was actually first shown to the public at the Shoshinkai show in 1996, but was heavily delayed, with little information revealed to the public. According to Amir, who was working on *Mario Artist: Paint Studio* at Software Creations, it wasn't just the public that were left in the dark. "I actually left the project to help start ZedTwo and work on *Wetrix* before *Mario Artist* was finished," he explains. "That project brings back a lot of mixed memories – it just went on for so long, and at various times

» [N64] As much as the N64 was a hotbed of innovation, some of its best games were just established ideas done really well.

NINTENDO64

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» [N64] Even with the Expansion Pak, the ambitious *Dinosaur Planet* would have been too much for the N64.

» [N64] This area of *Donkey Kong 64* uses dynamic lighting, relating to the clever use of the Expansion Pak described by Mark Stevenson.

» [N64] Bilinear filtering helped to avoid the blockiness seen with close-up enemies in first-person shooters on other hardware.

» [N64] Only a few games required the Expansion Pak, so as not to split the user base into haves and have-nots.

» [N64] Pre-rendered objects on real-time 3D assets was a fairly common look in N64 games.

it didn't feel like it was ever going to come out. During my time on the project, some three to four years, we never even saw prototype 64DD devkits." The device finally arrived in Japan in December 1999, and received very little support, with *Doshin The Giant*, *F-Zero X Expansion Kit* and *SimCity 64* being its most notable games.

However, the 64DD came bundled with something that wound up being far more important – the Expansion Pak. This plug-in module doubled the RAM of the console, and was supported by dozens of cartridge games. Most games used this to offer high resolution modes, but some such as *San Francisco Rush 2049* included exclusive gameplay content such as extra stages. The most ambitious three were *Donkey Kong 64*, *Perfect Dark* and *The Legend Of Zelda: Majora's Mask*, which all required the Expansion Pak. Mark Stevenson remembers it being beneficial in terms of standard things like level size in *Donkey Kong 64*, but there were also more creative uses. "One thing I remember that we did use it for was that we had a lot of dynamic lighting in there, which was hard to do and expensive," he recalls. "One of the engineers wrote a system whereby you'd go into a cave area, and there'd be a swinging light – the first swing of that light, it'd record all of the colour changes on all of the vertices in that area, and then save it as data and just play it back as an animation rather than going on to calculate the lighting constantly. You'd get a little bit of slowdown when you went in, but after that it was nice and smooth." Even with the memory boost, developers did eventually

» [N64] Eric Johnstone got to spend a lot of time at SGI watching the hardware evolve while developing *Star Wars: Shadows Of The Empire*.

find the system's limits – something you can see in the leaked demo of Rare's unreleased game *Dinosaur Planet*. "I think we were running at 15fps most of the time so clearly had pushed it too far! But as with *Diddy Kong Racing* (and much of the *Dinosaur Planet* team were from that team also) we just wanted to realise our vision and screw the technical limitations," says Lee. "I had a great moment with *Dinosaur Planet* when I demoed the game on a giant projection screen at Rare with ex-Nintendo Of America president Arakawa-san and it's like this big cinematic-style game coming out of an N64… lots of applause and a happy moment for the team." The game ultimately received a new direction and was redirected towards the N64's forthcoming successor. "*Star Fox Adventures* happened which was both a blessing and a curse but out of that transition a few of us (myself, Kevin Bayliss and Phil Tossell) at least got to go work with Miyamoto-san and Iwata-san in Kyoto." Other games made similar leaps to the GameCube, including Capcom's *Resident Evil Zero* and Silicon Knights' *Eternal Darkness: Sanity's Requiem*.

Although the Nintendo 64 was a powerful console with many advanced features, it was

» [N64] Not every late game used the Expansion Pak to look great – *Sin & Punishment* was utterly superb on stock hardware.

» [N64] Though it required compromises, the N64 conversion of *Resident Evil 2* was a miraculous use of a 64MB cartridge.

unable to repeat the success of the SNES, which did eventually become the best selling console of its generation. The N64 sold fewer units than its 16-bit predecessor, and Nintendo fell behind Sony to become a distant runner-up in the global home console market. The N64 struggled terribly in Nintendo's traditional stronghold of Japan, where the console's relative lack of RPGs was a real problem, and it even wound up selling fewer units than the Sega Saturn. It also has fewer software releases than either of its competitors – just under 400, compared to over 1,000 for the Saturn and over 4,000 on the PlayStation. While it should be noted that Nintendo remained profitable throughout the N64 years, judged by these measures the console does not look like a success.

But it's impossible to deny the legacy of Nintendo's console. For a start, it was influential at a hardware-design level. As Lee pointed out, every console manufacturer eventually borrowed bits of the N64 controller, even if its distinctive shape wasn't one of them, and four controller ports became standard until wireless connectivity made them redundant. What's more, it's arguable that the N64 did more than any of its rivals to advance 3D gaming. It was a small but significant step forward graphically – when compared to the blocky textures and wobbly walls of PlayStation and Saturn games, N64 games generally look more solid and stable. But more than that, the hardware arrived at a time when developers were still working out how to design 3D games, and the reason that the N64's hit list is so familiar is because so many of its games provided a template for the rest of the industry to follow. It's certainly telling that Nintendo didn't radically alter its designs for *Mario* and *Zelda* on the GameCube.

Twenty-five years on, that's perhaps the best way to contextualise the N64's place in history. It's a piece of hardware that was designed by experts in 3D, who didn't just care about having it as a selling point, but making it look better than anyone else did. It ran games that elevated the standards that players expected of 3D games, from control schemes to inventive stage designs. Although it wasn't the most popular platform of its day, the N64 was the console that confidently signposted our way into the 3D future.

PRESS AND IMPRESSED

JES BICKHAM OF N64 MAGAZINE RECALLS HIS TIME WITH THE CONSOLE

Describe what it was like seeing N64 games for the first time.

The first N64 game I saw (and played) in the flesh was *Super Mario 64* on a demo pod in Dixons in Bristol. (I didn't write for *N64* until issue 7.) It was mind-boggling; the chunky 3D visuals, the movement and momentum, the sense of space and play. It's hard to overstate the translation of 2D to 3D gaming as presented in that game alone; what an impact! And it felt like an ambassador for the future and all the N64 games that followed: *this* console can do *this*, and *this*, and *this*.

What do you feel was the most technically impressive game on the console and why?

Early doors, *Wave Race 64* was a contender. That water, for all its chunky, polygon-heaving look now, remains remarkable (the GameCube sequel *Blue Storm* couldn't touch it). The *feel* of it! *Perfect Dark*, at times, was transcendent, even if its reach outstripped its grasp at times. (Anyone who tried to play Counter-Ops with a single-digit framerate can testify.)

How important do you feel the inclusion of four control ports was to the success of the system?

Essential. The hundreds or thousands of hours we lost in the N64 office to multiplayer games of *Mario Kart 64*, *Smash Brothers* and *GoldenEye* were testament to that – every. Single. Lunchtime. And that was a thing that translated to bedrooms and living rooms globally. The multiplayer experience on the N64 was glorious – no need for multi-taps, just plug in your controller and go.

N64 Magazine seemed very hyped about the Expansion Pak at the time. Do you feel that excitement was justified?

I think, looking back, it was exciting as it was a fix and a riposte to some of the bad press the N64 was getting at the time. Being frothing-at-the-mouth fans of gaming's great underdog, we were understandably thrilled about it; blurry visuals were always a criticism, then *Turok 2* rolled around and looked like a million dollars. Was that excitement justified? No, probably not, it was more of a marker of where the critical consensus was at the time, but it was a signpost of our love for the N64 and its games. And, you know, the Expansion Pak gave us the full *Perfect Dark* experience.

Why do you think *N64 Magazine* remains so well-loved today?

We all loved Nintendo. I mean, really, really loved Nintendo; and that passion and enthusiasm carried right on through to the readers. We were honest, too – as anyone who remembers the infamous *Superman 64* or *Mortal Kombat Mythologies* reviews will know – and I think that honesty meant people believed us when we were excited about something, as well as disappointed.

Also, everyone on the team was brilliant at their 'thing' and funny in their bones. We also had some of the best writers in the business. Every day was magic for us, and I think that came through on the printed page. Glory days!

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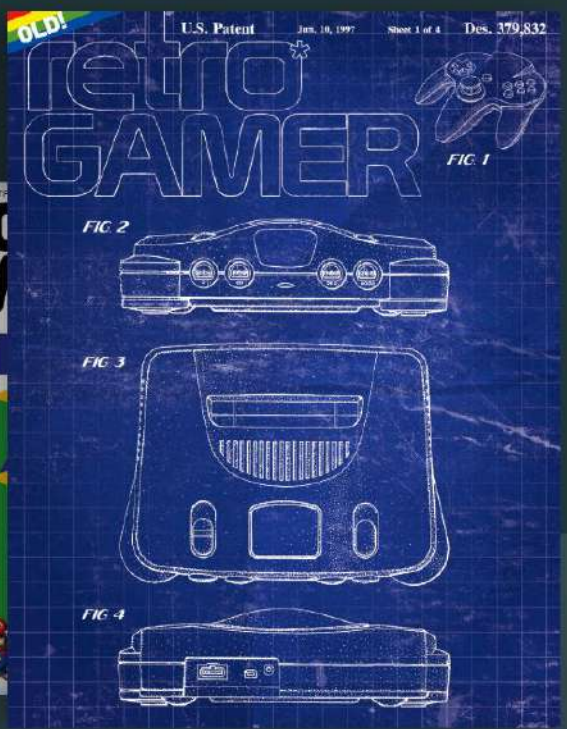

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THE EVOLUTION OF DIZZY

Inspired by cartoons and fantasy, the Oliver twins created an adventure trilogy based around an unlikely hero called Dizzy. They then oversaw his next four quests, and later designed his swan song. The Olivers explain how Dizzy's adventures evolved

WORDS BY RORY MILNE

It's fair to say that 1987 was a big year for teenage games developers Philip and Andrew Oliver. By spring, the twins had three successful budget titles on the market: the platformers *Super Robin Hood* and *Ghost Hunters*, and the top-down racer *Grand Prix Simulator*. But for their next game, *Dizzy – The Ultimate Adventure*, they looked to teatime television and a popular fantasy-themed coin-op for inspiration. "We absolutely loved four o'clock TV," Philip enthuses. "We would watch things like *Danger Mouse*, *Count Duckula* and *Scooby Doo*, and they definitely inspired *Dizzy*. In fact, you've got to find a vampire dux feather in *Dizzy*. We also played *Gauntlet* in the arcades, because that had just come out. We loved that the wizard always needed food – the narrator was always saying, 'Wizard needs food, badly!'"

Another influence was the Olivers' previously mentioned platform titles, but where they had locks and keys – literally or figuratively, *Dizzy* was instead based around related objects and obstacles. "With *Dizzy* the idea was to make the locks and keys part of lock-and-key problems, but dress them up," Andrew points out. "So you could have a rope, and you would have to find scissors to cut it. Then we realised that was pushing the game into a narrative – there just had to be something that stopped you until you found something to overcome it, and that made a story."

The genre the brothers chose for their platforming adventure was fantasy, but unlike similarly themed text adventures they limited Dizzy to carrying just one item. "The concept of picking stuff up and putting it somewhere wasn't something we had done before," Philip remembers, "we also designed *Dizzy* the way we did because it was halfway between an arcade game and an adventure. We'd played text adventures where you could pick up lots of objects, and we didn't like the fact that whenever you saw an object you picked it up. You didn't know why and you didn't care, so to a certain extent that meant there was no thought or tactics."

Dizzy's one-object limit created a lot of backtracking, however, so when the twins designed its sequel they gave it a three-item inventory and puzzle-based methods of dispatching Dizzy's more irritating opponents. "*Treasure Island* still depended on going back and forwards," Philip acknowledges, "and obviously as an arcade-

» Much as they love Dizzy, the Oliver twins don't plan on continuing his adventures.

» [ZX Spectrum] The colourful visuals in the original *Dizzy* adventure are inspired by Eighties kids' cartoons.

type game it had things that you had to swerve past and dodge. The first time would be a challenge, then the second or third time you'd know how to do it, but by the tenth time it would just be a pain in the arse!"

Treasure Island Dizzy also differed from the original adventure in that it featured more platforming and an optional coin-collecting sidequest, some of which took place in a sprawling tree house. "We thought a treehouse like the Ewok village would give us a vertical maze that you could navigate!" Philip beams. "It also gave us the opportunity to have lots of hard to get to places. So we put coins there, and if people got there they got them, but if not it didn't matter. We were a bit sneaky hiding one behind a railing and one behind a picture, but that added another level to the gameplay."

There were even coins hidden in the depths of the *Dizzy* sequel's ocean, thanks to the Olivers finding a way to integrate underwater platforming into *Treasure Island Dizzy*. "The minute you say 'Treasure Island' you ask yourself if

» [ZX Spectrum] *Dizzy*'s puzzles involve items and related obstacles – like a heart and a broken-hearted woman.

you could you go into the water," Philip notes. "Well there could be a shipwreck under there! So that sold the concept of going underwater, but how were we going to do that? That was a bit of a challenge, but we came up with an OK way of doing it. You didn't swim, you just walked along the bottom, but the platforming on the shipwreck worked quite well."

One other advance *Treasure Island Dizzy* made over its predecessor took the form of an interactive character, although for technical reasons his role was quite restricted. "I think we had the idea that maybe if we just had a single, stationary character, and if he only had one thing that he could do, it would still be suggestive of a bigger world," Philip ponders. "But it was so limited what we could actually afford on memory that the storekeeper was all you got!"

But having proven the concept, the twins created a whole cast of friends and family for Dizzy to interact with in the third adventure of a now highly popular series. "The ▶

"With Dizzy the idea was to make the locks and keys part of lock-and-key problems, but dress them up"

ANDREW OLIVER

STAGES OF EVOLUTION:

CHARACTER BUILDING

THE FRIENDS, FAMILY AND FOES OF THE DIZZY ADVENTURES

TREASURE ISLAND DIZZY

Like all good arcade adventures, the original *Dizzy* has puzzles and exploration, but it doesn't have any interactive characters. *Treasure Island* addresses this, to a limited extent, with the introduction of a storekeeper who trades things with Dizzy and gives hints via word bubbles.

FANTASY WORLD DIZZY

Building on the concepts behind the storekeeper, *Fantasy World Dizzy* introduces a whole cast of family and friends for Dizzy to interact with – there's also a troll that he has to deal with. His allies – the Yolkfolk – need his help, and they often give him required items in return.

WONDERFUL DIZZY

By the time of the latest *Dizzy* adventure, character interactions had become an essential part of the series, but *Wonderful Dizzy* takes the idea one step further. As a clever nod to its inspiration, many of the game's cast are Yolkfolk playing the roles of *The Wizard Of Oz* characters.

» [ZX Spectrum] *Treasure Island Dizzy* starts with a simple puzzle, where you use a chest to gain height.

» [ZX Spectrum] Working out which object overcomes which hindrance in *Treasure Island Dizzy* requires trial and error.

storekeeper had obviously just been there to swap things with," Philip observes. "But you were there to *help* the characters in *Fantasy World* – I guess that was the approach. In *Wonderful Dizzy*, when we were designing that decades later, we made a joke that Dizzy was always having to help everybody! Everybody needed Dizzy's help. You know, could nobody do anything for themselves?"

Having established Dizzy's new found helpfulness as a way to drive *Fantasy World Dizzy*'s gameplay, the brothers next thought of a narrative that lent itself to multipart puzzles. "When we themed *Fantasy World* we thought of *Jack And The Beanstalk*, because it gave the game a really good setting," Philip remembers. "You obviously had to plant the beans to get up the beanstalk, and from that we thought that there was a really nice chain of events that we could make a chain of puzzles from. So instead of individual challenges you would feel like you were partway through something that you wanted to see the conclusion of."

But while *Fantasy World*'s linked puzzles were commended by players when the game came out, Philip struggled to devise more when designing Dizzy's next adventure for Big Red Software to develop. "I thought about other fables and tales to base *Magicland Dizzy*'s puzzles on," Philip recalls. "There was the *Three Billy Goats Gruff* and *Excalibur*, and I had the Queen Of Hearts from *Alice In Wonderland*. I trawled through a load of stories and saw what I could come up with, but it was quite difficult to pull puzzles from them. With hindsight, we had got lucky with *Jack And The Beanstalk*, because it had been easy to pull long puzzle chains from that."

Undeterred by the difficulty of extracting challenges from children's fiction, Philip instead created a puzzle chain based on gathering items for a fictional character. "Witches were just a good thing to put in a fantasy world," Philip considers, "and of course if you had a witch then you had to have a black cat. Then you had to have a cauldron, and there had to be a potion that had to be made. That was pretty much the way I designed it. I picked Glenda The Good Witch, because she was from *The Wizard Of Oz*. It's interesting that I used her, I guess *The Wizard Of Oz* was quite an inspiration for us."

The brisk sales enjoyed by *Magicland* convinced Philip to let Big Red design Dizzy's next outing itself, but he disapproved of its plan to super-size *Spellbound Dizzy*. "Big Red tried to make *Spellbound Dizzy* the biggest *Dizzy* adventure possible," Philip sighs. "It had an internal challenge, which I didn't agree with, which was to make it 120 screens – or something like that. But that made the levels look pretty similar, because a lot of the graphics had to be reused,

STAGES OF EVOLUTION: PRACTICAL PUZZLES

HOW RELATED OBJECTS AND OBSTACLES KEPT THINGS SIMPLE

DIZZY

Although a few of the puzzles in *Dizzy* require trial and error, the majority can be solved by using items that are associated with whatever's blocking your way. Energy-sapping birds can be dispatched with birdseed, for example, and you can shift a rusty mine cart with a grease gun.

MAGICLAND DIZZY

Like the original adventure, *Magicland Dizzy* has connected pairs of objects and problematic situations, but it helps you to identify solutions to its puzzles by basing them on storylines from popular literature. So there's a cross and a vampire, and a cloth to rub a dusty magic lamp.

SPELLBOUND DIZZY

There's very little in the way of fable or folklore-related puzzles in *Spellbound Dizzy*, but it's generally obvious which items apply to which challenges. That said, there are obscure combinations that require trial and error to figure out – like using a ZX81 to power a substation!

» [ZX Spectrum] Dizzy's friends and family first appear in *Fantasy World Dizzy* as text adventure-like interactive characters.

which made the game much harder to navigate and less interesting to play."

There were also doubts in Philip's mind about the mobile trampolines that Big Red introduced into *Spellbound Dizzy*, although he concedes that players enjoyed them. "I thought a mechanic like that was scary," Philip reflects, "because what would happen if someone broke your maps by moving the trampolines around? But Big Red got away with it, and I have to say that it generally did a good job, which was why we left it to it. So *Spellbound Dizzy* was sprawling, and there was nothing clever about that, but a lot of people seemed to like it, and it did OK."

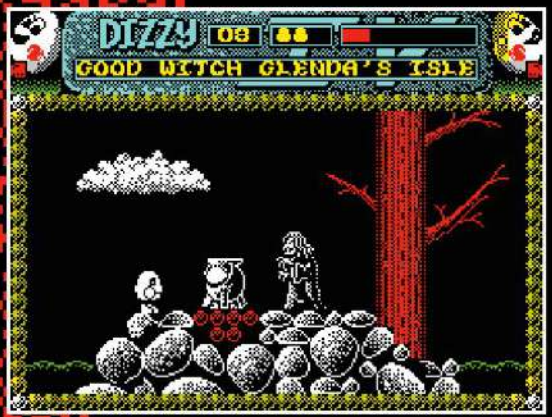
Putting his reservations aside, Philip tasked Big Red with producing the subsequent *Dizzy* adventure – *Prince Of The Yolkfolk*, but not before giving it some friendly advice. "We told Big Red not to 'go big' after it did *Spellbound Dizzy*," Philip recollects, "that it wasn't actually that clever to do that just for the sake of it. So with *Prince Of The Yolkfolk* it went in the other direction, which was good because it worked. Big Red came up with some really clever ideas for *Prince Of The Yolkfolk*; we thought that the variety and the puzzles that it used in that were great."

Other aspects of the latest adventure also improved on *Spellbound Dizzy*, including the fact that its challenges mined children's stories instead of using arbitrary items. "We thought the folklore brought a little bit of magic to *Prince Of The Yolkfolk*," Philip reasons. "It was a nostalgia thing for players, because being read fables by their parents or whoever were good times associated with their childhoods. So it was better to use items related to those stories ▶

» [ZX Spectrum] The chained puzzles in *Fantasy World Dizzy* are largely based on *Jack And The Beanstalk*.

> "We told Big Red not to 'go big' after it did Spellbound Dizzy. So with Prince Of The Yolkfolk it went in the other direction"
>
> **PHILIP OLIVER**

» [ZX Spectrum] Various childhood fables provide the basis for the puzzles in *Magicland Dizzy*.



» [ZX Spectrum] The variety of the stages in *Prince Of The Yolkfolk* makes them easy to navigate.

» [ZX Spectrum] In a sign of things to come, *Magicland Dizzy* features a witch from *The Wizard Of Oz*.

▶ rather than random objects that didn't bring any emotion with them, because we wanted the Dizzy adventures to be happy experiences."

Quarrels with publisher Codemasters over the next *Dizzy* project made it far from a happy experience for the Olivers, but Philip couldn't fault the ambition of the development teams Visual Impact and Reflective Designs. "*Crystal Kingdom Dizzy* was a flagship title for Codemasters," Philip says thinking back, "because it was known for £2.99 games, and this was going to go for £12.99 or whatever. So its developers were told to make a bigger game to justify the higher price, and they decided to make four different chapters from a map that was four times bigger than previous *Dizzy* games – although that led to multiple loads."

As well as being split into four distinctly themed sections, *Crystal Kingdom* was also stuffed full of characters from previous *Dizzy* games, plus a few surprise cameos. "Codemasters was chucking everything at it!" Philip laughs. "*Crystal Maze* was big at the time, so Richard O'Brien was put in there. The Yolkfolk had been popular in the past so they stuck them all in too. CJ wasn't part of the *Dizzy* series, but he was a good character, so it stuck him in anyway, why not? Then it made sense to advertise the *CJ* games in *Crystal Kingdom*; we used to do that with our games too."

In terms of innovations, *Crystal Kingdom* allowed Dizzy to change direction mid-fall and jump varying heights, although the latter mechanic was dropped before the game's release. "I liked the idea of redirecting Dizzy mid-flight, because it was a bit annoying in the earlier *Dizzy* adventures that they didn't have the best controls in the world," Philip admits. "But I wouldn't have put in variable height jumps. I don't think they would have been very intuitive, and you could break maps so easily that you wanted to be careful of things like that."

Decades later, an enhanced homebrew version of *Crystal Kingdom* appeared, and by chance this coincided with the Olivers being asked to continue Dizzy's adventures. "We had gotten in touch with the guys who had remade *Crystal Kingdom* to congratulate them, and around that time we offered to help Henrique Olifers' Spectrum Next Kickstarter," Philip reviews. "He said we could maybe do a new *Dizzy* game for him, and we told him we couldn't. But maybe the guys who remade *Crystal Kingdom* could, so we got out of that trap by agreeing to do a full design for a new *Dizzy* adventure."

But after delegating the new title's coding and visuals to the *Crystal Kingdom* remake team, Philip realised its design had to top players' memories of past *Dizzy* games. "I had a sleepless night thinking about how to pull it off," Philip frowns, "until I leaned on the idea of using a classic story, and *The Wizard Of Oz* popped into my brain. It was an uncannily good fit! The

> The Wizard Of Oz popped into my brain. It was an uncannily good fit! The Lion, Scarecrow and Tin Man could be Dylan, Denzil and Dozy"
>
> PHILIP OLIVER

» [ZX Spectrum] Although from a different series, CJ The Elephant makes an appearance in *Crystal Kingdom Dizzy*.

» [ZX Spectrum] Due to memory constraints, many of *Spellbound Dizzy*'s numerous levels look very similar.

DIZZY
OH... IT'S SOOO COLOURFUL, IN A KIND OF ATTRIBUTED, LOW RESOLUTION, LIMITED COLOUR PALETTE SORT OF STYLE!
NO PLACE LIKE HOME
00
01000

» [ZX Spectrum] Although previous *Dizzy* adventures had a little humour, there's far more in *Wonderful Dizzy*.

Lion, Scarecrow and Tin Man could be Dylan, Denzil and Dozy, and I could map other *Dizzy* characters to *The Wizard Of Oz* characters. I told Andrew the next day when I went into work that I'd solved it! And he thought it was perfect."

Besides suiting Dizzy's cast, *The Wizard Of Oz* was ideal for sourcing puzzles for Dizzy's latest adventure – *Wonderful Dizzy*, which Philip thought should be humorous. "Dialogue doesn't use up too much memory," Philip explains, "so we went to town with that, and made it as funny as possible. To a certain extent, we could get the characters' personalities from the book, and you then just had to think of jokes around them. Like we had two twin guards, and we thought it would be funny if one of them liked C64s and one of them liked Spectrums! So we made a bit of a joke about that."

One last gift that *The Wizard Of Oz* gave the twins was its final chapter reveal that the trip to Oz had been a dream, which the brothers adapted to give *Wonderful Dizzy* a second ending. "Our double-ending was: did Dizzy really go to Oz?" Philip grins. "So when he found a coin from Oz at the end, well how was that possible if he hadn't gone? So we thought that was cool. The second ending was linked to finding the last coin. So you could complete it, but then you could *really* complete it, and since you could look for solutions online it didn't matter if it was really hard to get the final coin."

Given how perfectly everything fell into place for *Wonderful Dizzy*, it's no wonder that the adventure was celebrated by fans when it appeared online. So how do the Olivers rate it against its predecessors, and will the twins ever design another? "Hah! I don't think we will!" Philip exclaims. "One of the reasons for making *Wonderful Dizzy* was: this is it, let's end on a high. That was another reason for making sure it was the best *Dizzy* game and then some. Although I think we did a damn good job with all of the *Dizzy* adventures, and we're very proud of what we achieved with them." ★

STAGES OF EVOLUTION: TREASURE HUNT

COLLECTING COINS, PICKING CHERRIES AND FINDING GEMS

TREASURE ISLAND DIZZY

Due to criticism that *Dizzy* was too easy to complete, the Olivers gave its follow-up *Treasure Island Dizzy* a tricky sidequest. Although not essential, if you solve the sequel's puzzles you're challenged to find numerous gold coins that are hidden or located in hard to reach places.

PRINCE OF THE YOLKFOLK

Secondary objectives aren't to everyone's taste, especially if they involve endless collecting, so with *Prince Of The Yolkfolk* there's an added incentive to seek out its treasure. More specifically, the game's cherries boost your health, so you can just pick them when you need them.

CRYSTAL KINGDOM DIZZY

Like *Prince Of The Yolkfolk*, there's a cherry picking sidequest in *Crystal Kingdom Dizzy*, but it also has two other treasure hunts. In one, you look for a diamond to summon a genie, while in the other you have to find a crystal in a maze – there's even a cameo from Richard O'Brien!

The Berlin Wall

"I'M LOOKING OVER THE WALL AND THEY'RE LOOKING AT ME!"

» Game Gear » 1991 » Kaneko

One of the things I really love about the very early days of console magazines in the UK is the prominence given to import games. Rather than being confined to their own small section at the back of the review pages, they were given equal billing with domestic releases, which meant you'd get to see all sorts of weird and wonderful stuff that might never even make it over here. *The Berlin Wall* was one such game that I saw in a hand-me-down copy of *Sega Pro*. I thought it looked very cool and the review suggested it was great, but I had no opportunity to play it at the time as I got my first handheld console about a week before the end of the Nineties.

For those of you expecting some Cold War shenanigans, forget it – while the original arcade version was full of digitised photos of that major moment in political history, *The Berlin Wall* on Game Gear has absolutely nothing to do with its real-life namesake. Well, unless historians have lied to me and there really was some bloke with a hammer getting chased around by penguins. I don't know, I was a toddler. Anyway, it's one of those puzzle platform games in the tradition of *Lode Runner* and *Space Panic*, in which ladders are crucial for movement and you defeat enemies by smashing the floor away to trap them.

Apart from looking quite a lot nicer than those older games, *The Berlin Wall* includes modern elements like boss battles, and it makes things a little easier on the player by making enemy movements more predictable. There's even a neat little combo mechanic – if you smash one enemy through the floor, it'll take out any enemies it falls on too.

Sadly, *The Berlin Wall* never officially made it to UK shelves. In fact, even though a North American version was not only planned but advertised in magazines, the game never made it out there either. That's a real shame, though you really don't lose much when you play it with Japanese text, so it's worth a look regardless.

THE MAKING OF Castle Master

SET IN THE PAST BUT EMPLOYING VERY MODERN TECHNIQUES, CASTLE MASTER WAS A 3D MASTERPIECE OF VIDEOGAME DESIGN MADE POSSIBLE THANKS TO THE FREESCAPE ENGINE. INCENTIVE SOFTWARE FOUNDER IAN ANDREW LOWERS THE DRAWBRIDGE AND LETS US EXPLORE HOW IT WAS MADE

WORDS BY DAVID CROOKES

IN THE KNOW

- **PUBLISHER:** DOMARK
- **DEVELOPER:** INCENTIVE SOFTWARE
- **RELEASED:** 1990
- **PLATFORM:** AMSTRAD CPC, VARIOUS
- **GENRE:** 3D ACTION

The whereabouts of the princess in Incentive's fifth 3D masterpiece was known to players from the start. She was being imprisoned in a tower in Castle Eternity and once you managed to get close, there was thankfully no suggestion she'd be whipped away to some other fortress.

It's just as well, too, because after hours, days, weeks or even months of exploring the nooks and crannies of the castle and teasing your brain with myriad puzzles, the last thing you'd want to do at that moment in time is go through it all again.

You'd triumphed. Glory was yours. And yet you could, if you so wished, play the whole thing once more, this time as her twin, the prince (or the other way around if you'd chosen the princess first).

This was the deep nature of *Castle Master*, a game in which you could be either the prince or princess and have a slightly different experience with each. "It gave gamers an extra reason to play again," says Incentive boss, Ian Andrew. Even so, the crux of the plot was the same. One of those characters would end up as the spirit slave of the evil soul-stealer Magister unless the other was able to rescue them.

» [Amstrad CPC] Many rooms contain an evil spirit and if you don't manage to eliminate them, they'll quickly zap your energy

» [ZX Spectrum] As well as the courtyard, where the chapel is located, gamers could make their way across three levels of the castle.

By this point, Incentive was on a roll. Between 1987 and 1989, it had already used its in-house rendering engine, Freescape, to create *Driller*, *Dark Side* and *Total Eclipse*, adding *Total Eclipse II: The Sphinx Jinx* as a nice little extra for customers of the Home Computer Club. In doing so, the developer had attracted a good number of fans – gamers who loved to explore worlds made from solid 3D polygons rather than wireframe graphics as tended to be the way.

> "We also ensured we'd built the Freescape engine first, way before any game code was added" **Ian Andrew**

"The engine had been the product of many man-hours," says Ian, who knew from the outset that the software would be difficult to develop but handed the task to brother Chris Andrew nonetheless. "The main challenge was the speed of update on 8-bit computers, but a breakthrough came when we discovered a faster way than z-buffering [a technique also known as depth buffering] to create the 3D scenes."

Without becoming too technical, the breakthrough involved holding individual elements within a bounding box, allowing the z-order to be completed with a single check as opposed to thousands if each individual pixel was being checked. "It was thousands of times faster," Ian says of the technique. "We also ensured we'd built the Freescape engine first, way before any game code was added." Work had begun in 1986 with Chris as lead coder and it ensured all of the building blocks were in place from the start.

What perhaps made Freescape more of a technological triumph, though, was the small amount of memory the developers had to play around with. The engine was actually created on an Amstrad CPC 6128, perhaps showing just what this machine was capable of. It was then ported to other computers, notably the ZX Spectrum, Commodore 64, Amiga, Atari ST and PC. In each case, gamers came away impressed. Not that there wasn't room for

Master

Ian Andrew

» Ian Andrew was the founder of Incentive Software and the designer of *Castle Master I* and *II*. He is currently the CEO of games publisher H23 and his gameography can be found at ianandrew.com.

DEVELOPER HIGHLIGHTS

DRILLER (PICTURED)
SYSTEM: AMSTRAD CPC, VARIOUS
YEAR: 1987

DARK SIDE
SYSTEM: AMSTRAD CPC, VARIOUS
YEAR: 1988

TOTAL ECLIPSE
SYSTEM: AMSTRAD CPC, VARIOUS
YEAR: 1988

» [Amiga] There's a maze of corridors to navigate so have a pen and paper handy.

improvement. "The programmers were refining the engine each time for speed, looking at everything," Ian says. "As well as the sorting technique, we also wrote a lot of the code in assembler which is much faster than other languages because it's at a low level. It was harder to code but much faster and smaller."

As such, for *Castle Master,* the game engine was tweaked to become Freescape+ and it not only ran 10% faster but drew the environment using smaller blocks. Ian designed the game, coming up with its premise and sketching the environments and puzzles out on paper before any design work took place digitally.

"The idea was the traditional 'rescue the princess (or prince) from the castle tower,'" Ian affirms. "Since the Freescape engine could now display more polygons, we didn't need to limit the basic building blocks to pyramids and the like as was the case in *Total Eclipse*. I designed the castle with a square footprint, having a tower at each corner, corridors joining them together, and a courtyard in the middle." It may sound simple but, in reality, the environment was rather complex.

To get around *Castle Master* effectively, you really needed a pen and some paper to create your own map because it was easy to become lost and often difficult to get your bearings. There were ten keys strewn around the castle and each one unlocked a specific ▶

CONVERSION CAPERS

WHICH VERSION SHOULD BE BANISHED TO THE DUNGEONS?

AMSTRAD CPC

Running smoothly at a fair old speed, *Castle Master* made great use of the Amstrad CPC's four-colour video mode. Although it had its downsides (the moat looked like a shadow, for instance), it meant encountering each area of this fortress tended to feel fresh. It's just a shame the sound effects were so poor.

ZX SPECTRUM

Ouch, our eyes! To be honest, the opening shot of the castle wasn't the most inviting of starts, the building's exterior as bright green as the grass. But although the monochrome graphics made it more difficult to see the game's various objects, it still managed to draw players in. The game also moved at a great pace.

COMMODORE 64

What this version gave with one hand (a lovely medieval tune), it took away with another since it was a game so incredibly sluggish that playing proved to be pretty tough going. This was doubly disappointing because the graphics had benefitted from super shading and yet it still had bags of atmosphere.

AMIGA

As you'd perhaps expect, the presentation of *Castle Master* on the 16-bit computers was a step above that of the 8-bits and the game was all the better for it. As well as being more graphically detailed, the game could be played with a mouse unless you fancied a keyboard/joystick combo instead.

ATARI ST

The Atari ST version was also highly polished, with some lovely sound effects as opposed to music, and graphics that were pretty much identical to those seen on the Amiga. Being able to click around on the icons dotted around the playing area, as on the Amiga and PC, made exploration easier too.

DOS

Unlike the Amiga and Atari ST versions, there was no satisfying animation of your sibling being kidnapped once you'd chosen the character you wanted to play as. The graphics were also more vividly colourful than on the 16-bit computers and felt rather jagged around the edges. With sparse sound, it was a little disappointing.

door. You also had to solve an array of puzzles (starting by figuring out how to lower the castle's drawbridge), find and use objects, keep your strength up by eating cheese and avoid falling into the catacombs because it wasn't that easy to get back out of them.

"Once I'd sketched out the game on paper, I used the tools the programmers had put into Freescape," Ian says. "I used the Freescape Command Language to build the rooms and add the functionality. It was hex-based so I was always looking up what E5 related to, for instance. But I loved the design process and I wished to do more, even now."

What emerged in this instance was a game that made exploring easier and more varied than in previous Freescape titles. Players could switch between walking and running to speed up the time it took to get around. It was also possible to crawl, which was important in order to find some otherwise hidden objects. You could navigate the world using a mouse on the Amiga, Atari ST and PC to click the options surrounding the playing area. Otherwise, a combination of joystick and keys would work well. It felt intuitive very quickly.

Dab hands at playing previous Freescape games had to acquaint themselves with a new action button, though. Pressing this would make eating and drinking easy but you could also use it to pick up and examine items, collect various things, push objects around, unlock and open stuff and do lots of other fun things along the way, so long as you were within arms reach. It made the castle feel interactive because you actively had to engage with your surroundings and it also encouraged exploration. You'd often have to poke around in the nooks and crannies of this fortress in order to discover all you needed and the game made doing such things easy.

» [Amiga] You could decide to play as either the prince or the princess. Your decision also affects who is kidnapped.

» [Amiga] Collecting keys is vitally important. You'll also come across an assortment of potions.

Ian certainly enjoyed devising the puzzles, firmly believing that a good adventure required much more than hot-footing it around a new world collecting things. For him, the pleasure was in teasing the player with logical brain-taxing conundrums set at a level that wouldn't spill over into frustration too quickly. "I naturally think of puzzles," says Ian, who also decided to pop some cryptic clues around the castle to lend a hand. "I have been

ENTER THE CRYPT

DARE YOU GO BACK INSIDE FOR THE SEQUEL?

It was no great surprise that *Castle Master* was blessed with a sequel. "It actually came out at the same time as the original game but only for members of the Home Computer Club," says Incentive boss Ian Andrew, of a release which bundled *Castle Master I* and *II* together.

What was perhaps surprising was that *Castle Master II: The Crypt* would then later appear in a compilation put together by Domark called *Virtual Worlds*. Thing is, if Freescape fans of the original *Castle Master* wanted to play the follow-up, they'd have to fork out for *Driller* and *Total Eclipse* too, although, for some inexplicable reason, those buyers didn't get the other Freescape adventure, *Dark Side*.

Although *Castle Master II: The Crypt* offered more of the same, it was actually a more difficult game. Players were tasked with escaping from the crypt and had to make their way up to the top floor, solving tricky puzzles along the way.

"I knew I could come up with more puzzles around the *Castle Master* concept and it took me about four weeks to design the sequel," Ian says. He admits it was an entirely commercial decision, both to have the game as an exclusive for the Home Computer Club and to make it part of a bundle rather than a standalone title. But that doesn't lessen its value. By this point, players will have got the hang of the *Castle Master* concept so some head-scratching teasers should be expected. If you do manage to complete it, though, be warned: the ending isn't all that satisfying.

» [Amiga] Oh no! It's Igor and you're in his chamber. Get those rocks ready so you can safely open a chest.

» [Amiga] Always expect the unexpected such as when you shoot the flag blowing in the breeze.

making games since I was a small boy: wooden pinball game, mazes, obstacle courses for my friends in my road. Puzzles come easy to me."

As with the previous Freescape games, players enjoyed exploring from a first-person perspective. "Adding your character as a visual would have been too processor intensive," Ian says. "So we took the decision to allow players to enjoy the game through the eyes of the explorer to retain the game's speed." This worked in *Castle Master*'s favour, creating a greater connection with the character and the perils that may befall him or her. One of the dangers was having to avoid being killed by the game's guardian spirits and this added a dollop of action to the proceedings.

As the story goes, Magister had created the ghouls when he regained power and imprisoned your sibling. If they got too close too often and managed to drain your energy – referred to as your spirit level (geddit?) – then it would be game over. "We created the spirits to add as much interest as we could," Ian says. Unfortunately, you only had one way to dispatch them: quickly chuck a few rocks. "Yes, there was a single weapon but I didn't really think about it," Ian laments. "I suppose more weapons could have been added."

» [Amstrad CPC] The screen flashes as a fiendish ghoul waits in the lobby. Time to lob some rocks at his head.

> "It was the best Freescape game we had made" **Ian Andrew**

In truth, this didn't detract from the experience. In fact, it gave players one less thing to worry about in a game that was challenging enough. A lot of effort had gone into small details and nice extras – the 'glug, glug, glug' of drowning in the moat; the perils of touching a torch, the ability to explore the wizard's hut outside the castle spring to mind. There were some lovely animation effects (and pleasant music in the Commodore versions). This was a game that was clearly a labour of love rather than just another effort from the Freescape assembly line. "It was the best Freescape game we had made," affirms Ian. "It had the best visuals and the most rounded experience but it had to be the best, or else it would be compared to *Total Eclipse*, and reviewers may have said 'more of the same.'"

Unlike previous Freescape releases, Incentive didn't publish *Castle Master* itself. Instead it handed over the task to Domark and Ian was relieved the publisher had taken it on. "I think the marketing that Domark did was important. They set an atmosphere before even you played the game," he says.

The adverts used the same graphic which adorned the *Castle Master* box – a splendid piece of art by David Wyatt showing the castle in all of its gloomy glory as lightning flashed all around it. Domark made sure potential players knew of Incentive's pedigree; that its past games had received the *C&VG* Golden Joystick Award, for instance. "Master the most atmospheric action adventure you'll ever play," the advert said. "Enter Castle Eternity if you dare! You could be there forever."

» [Amiga] Let's get started and here's a solution for free: fire at this little switch but watch the drawbridge doesn't hit you.

» [Amiga] As well as coming across clues in the game, you should read through the mammoth poem in the manual.

» [Amiga] When you find yourself in the chapel, look up at the hole in the roof and head for the altar too.

» [Amiga] As well as being able to gobble up some cheese left out on the table, why not see what happens if you walk through the fireplace?

This wasn't wide of the mark. The game could – and often did – take many weeks, sometimes months to master and complete. But then Incentive wanted to ensure that players got their money's worth from this full-price release. "We created the manual after we completed the game and this included a poem because we wanted to add value," Ian says. Penned by the legendary Mel Croucher, the poem contained a few clues and ran across 13 pages, albeit only in the English section of the manual. Those playing French, German or Italian would have to get their dictionaries out and then try and make sense of it all.

Sadly, other than a sequel to *Castle Master*, Incentive decided this game would be the last Freescape title it would make. It had gone out on a high, leaving gamers wanting more, but the developer decided instead to pass the baton on to gamers in 1991 by releasing the *3D Construction Kit* and allowing players to develop their own worlds and games using the Freescape engine.

"When we'd decided to create the Freescape engine, we had been considering whether we should soon be developing for consoles," Ian says. "The alternative was to come up with something different on home computers and I think we did that very well." ★

Hardware Heaven

Atari 800

» **MANUFACTURER:** Atari » **YEAR:** 1979
» **COST:** £625 (launch), £400+ (today, boxed), £95+ (today, unboxed)

Having successfully launched a brand-new videogame console into the world with the Atari 2600, the company's engineers were quick to get to work on a follow-up. However, incoming Atari CEO Ray Kassar felt that the technology under development would form the basis of a fantastic home computer, which could potentially challenge Apple. Two models were put into production – the low-end Atari 400 and the more expensive Atari 800. The Atari 800 had a proper keyboard and two cartridge slots, compared to the membrane keyboard and single cartridge slot on the 400, and RAM could be expanded by the user too. Both shared a similar beige look typical of the Seventies, and the cartridge slot is less prominent on the 800.

Both machines were warmly received for their powerful hardware, particularly when it came to graphical performance in games and other programs. Unfortunately for Atari, they were expensive to manufacture and not particularly profitable due to the competitive market. New versions with redesigned casing and model numbers ending in XL were introduced in the early Eighties and sold moderately well, though Atari would ultimately end up suffering further due to the home computer price war initiated by Commodore, and the user base was comparatively small by the mid-Eighties. ✱

SYSTEM SUPPLIED BY **EVAN AMOS**

Atari 800 fact

■ The Atari 800 was rather less popular than its more affordable sibling, reportedly selling roughly half as many units as the Atari 400 despite its considerable advantages.

PROCESSOR: MOS 6502-BASED SALLY 8-BIT CPU (1.79 MHZ)

RAM: 16KB (EXPANDABLE TO 48KB)

GRAPHICS: ATARI ANTIC AND GTIA

AUDIO: ATARI POKEY

MEDIA: ROM CARTRIDGE (CASSETTE AND FLOPPY DISK OPTIONAL)

ESSENTIAL GAME

Dropzone

Archer Maclean was an early adopter of the Atari 800, spending hours playing Atari's highly impressive game *Star Raiders*, and eventually ended up writing one of its most iconic games himself. The scrolling space background was impressive, the gameplay was super fast and the overall level of polish was so high that even the map at the bottom of the screen was highly detailed. It is a tough game, as you'd expect any game inspired by *Defender* to be, but it's an excellent shoot-'em-up that can still deliver some fantastic sessions if you're in the mood for a challenge.

ULTIMATE GUIDE

双截龍 DOUBLE DRAGON II The Revenge

DOUBLE DRAGON WAS AN ARCADE SMASH, AND THANKS TO ITS CO-OP PLAY AND WEAPONS-BASED COMBAT, IT WOULD GO ON TO DEFINE THE BEAT-'EM-UP GENRE. A SEQUEL WAS A SURE THING, BUT SECOND TIME ROUND DID THE DRAGONS ROAR OR SNORE?

WORDS BY MARTYN CARROLL

***Double Dragon II* was subtitled *The Revenge*, on account of it beginning with Billy Lee's girlfriend Marian getting brutally murdered by Willy and his Black Warrior goons.** But if developer Technos was more candid the game might have been subtitled *The Revamp*, *The Retread* or even *The Rehash*. This was not so much a sequel as an alternative take on the original, and there was a sense of déjà vu from the second Billy and Jimmy emerged from their garage, consumed by vengeance.

Although you might have guessed it, series director Yoshihisa Kishimoto has confirmed that the game initially started out as an upgrade kit for *Double Dragon*. This is why many of the characters were simple palette swaps (with most of them rocking wild new threads and hairdos), and the four stages were simply redressed. In fact, the game actually used some animations that were already present in the original's code but went unused, such as Linda's elbow smash and Jeff's throw move. Similarly, two of the brothers' new attack moves – the rising knee and the signature hurricane/cyclone kick – were included in the original but were never used for whatever reason. Yoshihisa was viewing the upgrade as the 'final' version of *Double Dragon*, reusing assets and introducing some of the planned elements that he hadn't been able to implement beforehand.

Yet *Double Dragon* had been so successful in arcades throughout 1988 that it was soon decided to develop the proposed upgrade into a standalone sequel. The 8-bit hardware remained the same (so it still chugged when things got busy), but the amount of memory was increased to allow the team to add new assets. The main addition was a bunch of distinct new bosses. Willy was back as the final boss, and the previous bosses returned as mid-stage troublemakers, but there were now three new stage guardians: wrestling and reincarnation expert Burnov, Schwarzenegger-like strongman Abore and stick-wielding martial artist Chin Taimei. Plus, there was a new final, *final* boss. Rather than brawling with each other once Willy was defeated, as in the original, the brothers had to face their evil supernatural clones (which were supposedly the embodiment of their dark vengeance, or something, and required a fair few credits to conquer).

> "Double Dragon had been so successful that it was soon decided to develop the proposed upgrade into a standalone sequel"

Overall *Double Dragon II* offered up a tougher challenge than the original. Enemies were now faster and more evasive, which meant ▶

» [Arcade] The opening scene pulls no punches, as Marian is gunned down by Willy in a deadly retaliation attack.

» [Arcade] The directional fighting controls were taken from Technos' earlier brawler *Renegade*.

» [Arcade] When melees occur, which is often in the sequel, it can be difficult to stay on your feet.

» [Arcade] The weapons are straight swaps from *Double Dragon*. Linda's ball and chain replaces her whip from the original game.

» [Arcade] Trying not to get turned into a cereal bar in one of the game's more bizarre traps.

CONVERSION CAPERS

WHICH OF THE HOME VERSIONS HIT HARDEST?

COMMODORE 64

There were two versions of *Double Dragon* for the C64 and both misfired. The sequel manages to correct things, being both fun to play and pretty accurate (it's the only 8-bit computer version to include the final fight against the clones). It features great tunes too.

ZX SPECTRUM

Switching to monochrome graphics avoids the colour clash and speed issues that plagued the original, but the end result is a drab-looking affair. It's also too easy – you can beat it by hammering the cyclone kick. Play it on 128K, as the 48K version is a letterboxed nightmare.

MSX

In what was clearly a box-ticking exercise, this is a straight port of the 48K Spectrum version, making no use of the extra 16K available on most MSX models. A large area of the screen is left blank, resulting in a conversion that is '*Green Beret* on Commodore 16' levels of lousy.

AMSTRAD CPC (TAPE)

As with the original game, there are two separate versions on the CPC. The tape version should have been bundled with a bargepole, as it's similar to the awful 48K Spectrum version. It features more colour, but it's still unplayable. At least there's an alternative.

AMSTRAD CPC (DISK)

The superior disk version came courtesy of Richard Aplin, who also programmed the Amiga and ST versions. The graphics were actually converted from the ST, hence their impressive size. It's difficult, but so was the coin-op, and this version prides itself on accuracy.

AMIGA

Rather than porting it from the ST, Richard Aplin developed this version for the Amiga hardware, using overscan and blitter support to deliver a top notch conversion. Pretty much everything from the coin-op is included, making this the best computer version available.

that it was no longer possible to one-credit the game by spamming the elbow smash. This was picked up by reviewers when the game arrived on Western shores in early 1989. "The junkies are much harder than they were in the original," wrote *Your Sinclair*, calling it "more of the same". *C&VG* was not impressed, "The game is very difficult and not very enjoyable to play. Give me *Shadow Warriors* any day." Here was a thing – *Double Dragon* broke new ground with its co-op brawler play, yet that was 18 months ago and several similar games had arrived on the block ahead of *DDII*. This view however was not shared by *Commodore User*. "It's still head and shoulders above most beat-'em-ups," wrote Mike Pattenden, who awarded the game 7/10 due to the lack of innovation on show. "It simply isn't different enough from its predecessor. It would have made the game much fresher to have transported it to a different place with new backdrops and characters."

> "Enemies were now faster and more evasive. It was no longer possible to one-credit the game by spamming the elbow smash"

» [Arcade] Remember how the car from *Road Blaster* featured in the first game? Here the chopper from *Cobra Command*, another one of Yoshihisa Kishimoto's early games, cameos.

It was Ciaran Brennan at *The One* magazine who picked up on the most controversial change that has dogged the sequel since its release. "I was set to recommend the game whole-heartedly until I came across one major flaw – the control system. I found it quite difficult to get to grips with most of the fighting moves." For *Double Dragon II*, Kishimoto reverted to the directional control system which featured in *Renegade*, his 1986 precursor to *Double Dragon*. So whereas in the original you had buttons for punch and kick, in the sequel they were replaced with left attack and right attack, meaning that punch and kick swapped buttons depending on which way you were facing. A lot of players found the controls counterintuitive, especially after jumping over from the original. This is something that Kishimoto would later reflect on, telling historian Florent Gorges that while he preferred the directional controls, in hindsight he should have put the ▶

ATARI ST

This was ported from the Amiga, so some small compromises had to be made. Chiefly, the screen size is more compact, losing both horizontal and vertical resolution. The backgrounds have also been curtailed, but the core fighting game is the same, so it gets a thumbs up.

PC

Played in VGA mode, this looks almost identical to the ST version (albeit with a slightly smaller screen area). Sadly it doesn't play as well. The controls are a little off, which leads to constant beatings and sheer frustration. The audio will do little to soothe your irritation.

MEGA DRIVE

Arriving before the *Double Dragon* conversion, and only in Japan, this is not the faithful conversion you might imagine. The sprites are too small, the backgrounds are too basic, and it suffers from slowdown. The positives: stage two is extended and the soundtrack is great.

NES

While Technos avoided taking risks with the arcade game, it was willing to experiment on the NES and the result was this excellent offshoot that mixes brawling with platforming and a real sense of adventure. And two players can co-op, unlike the first NES game. No '*Single Dragon*' here.

PC ENGINE

Rather than revisit the coin-op, Naxat Soft chose to remake the NES game for the Super CD-ROM format. The result is a fine upgrade that retains the winning gameplay but adds improved visuals, animated cutscenes and CD audio – plus some elements from the coin-op.

GAME BOY

No flying kicks? No weapons? Is this really *Double Dragon*? Actually it's a *Kunio-Kun* game retooled for the West, like *Renegade* (it was originally going to be called *The Renegades*). On its own merits it's not a bad brawler, and co-op play is supported, but it's just not *Double Dragon II*.

BOSS RUSH

THE MAIN FOES YOU FACE ON THE MEAN STREETS

BURNOV

This mask-wearing clown has a nasty signature move where he lifts you off the ground by the hair and pummels you. When you defeat him his body disappears. Spooky!

HOW TO BEAT THEM:

If you can lure him to the far right of the screen you can punch him out of the play area for an instant KO. Otherwise wear him down with the trusty back kick.

ABORE

For an absolute unit he's fairly fast, and can do decent damage with his slap, kick and shoulder barge attacks. And just like the Terminator, he'll be back (in stage four).

HOW TO BEAT THEM:

Attack him as soon as his lift arrives, and he should fall onto the conveyor belt. Then kick him when he rises and the conveyor should claim him.

CHIN TAIMEI

This Bruce Lee wannabe wields a couple of sticks and likes to dance around the screen, flipping and kicking. His stick combos are quick and lethal so avoid going toe-to-toe.

HOW TO BEAT THEM:

Move vertically up and down and hit him with back kicks. Alternatively, see that small cliff edge in the bottom-left corner? You know what to do.

WILLY

The old boss is back with some new red threads to match the colour of his exasperated face. He'll try to gun you down, or thwack you with the butt of his gun if you get too close.

HOW TO BEAT THEM:

There are no traps to fling him into, so you'll need to try and corner him to prevent him from opening fire. Remember to defeat his minions before taking him on.

REVENGE SPIRITS

The evil twins have the same moves as you, plus some extra ones, including a spectral energy blast and an eerie attack where they disappear and then briefly possess you.

HOW TO BEAT THEM:

To avoid being possessed you must keep jumping: the power of height compels you, see? Spamming the back kick should see you through this cheap final battle.

player's satisfaction over his own. That said, there are some core fans who favour *Double Dragon II because* of its control system.

The controls were a moot point for the home computer versions, as they were designed to work with a joystick with a single fire button. Despite the conversions of the original game being generally sub-par, Virgin Mastertronic once again commissioned Binary Design to do the work and overall the results were significantly better the second time around. In particular the C64, Amiga, Atari ST and Amstrad CPC (disk *not* tape) versions all offered fair representations of the coin-op. Things were quite different on the consoles. The Game Boy received a Westernised version of a Japanese *Kunio-Kun* game and as such played very differently. The version for the NES was also its own thing, beginning in similar fashion to the coin-op but then taking a sharp left turn into platform territory. In total it featured nine stages, punctuated by static cutscenes, and was both brilliant and bonkers in equal measure. The later PC Engine version was an upgrade of the NES game, while the Mega Drive version was closer to the coin-op but far from arcade perfect.

Accurate home versions would arrive years later, on the PS4 in 2016 and the Switch in 2018, courtesy of Hamster. Alongside various gameplay options and display settings there is a one-credit Hi-Score Mode and a Caravan Mode (obtain the highest score in a five-minute period). Meanwhile the much-loved NES version has carved out its own path, appearing as a Virtual Console title on 3DS, Wii and Wii U. In 2019 it would

» [NES] Billy does his best Mario impression in the platform-heavy second stage.

» [GBA] Burnov makes a surprise entrance in the brilliant *Double Dragon Advance*.

appear on Switch, as part of its online subscription service and also as one of the 18 titles included in the *Double Dragon & Kunio-Kun Retro Brawler Bundle*.

Post *Double Dragon II*, the series has become long and knotty with various sequels, spin-offs and remakes (the famously awful *Double Dragon II: Wander Of The Dragons* from 2013 barely deserves this mention). Of special note for fans is Million's 2003 release *Double Dragon Advance*, which ostensibly is a remake of the first game for the Game Boy Advance, but it throws in elements from the NES conversions, *Super Double Dragon* for the SNES and even *Renegade*. *Double Dragon II* is also strongly represented, featuring its music and moves, plus Burnov and Chin Taimei make an appearance (Abore was due to appear, but had to be cut due to limited cartridge space). In addition, the game's seventh stage is based on *Double Dragon II*'s final stage, where the brothers infiltrate the enemy hideout, and features the same rousing theme – the perfect soundtrack for revenge! All this reminds us that, while not a fully-fledged sequel, and not without flaws, Kishimoto's sequel still holds an important place in the history of the series, and therefore the history of beat-'em-ups. ★

"A lot of players found the controls counterintuitive, especially after jumping over from the original"

DEVELOPER Q&A

PAUL RANSON CODED UP THE SPECTRUM VERSION

How did you become involved in this project?
I was the project manager and mentor for most of the versions of *Double Dragon* at Binary Design. After that I decided I would like to return to programming, so I did a deal to go freelance and *Double Dragon II* became the very first project for Big Red Software. I worked with my brother Peter, who was still at college at the time, and he did the graphics for me. I was a very passionate coder and was fascinated with making the game run as quickly and as accurately as possible.

Were you a fan of the arcade game?
We had the actual coin-op in the office and it was great. We all became experts! To be fair, *Double Dragon II* was a cash-in on the first one. There were a couple of new moves but even the intro sequence was kind of the same. It's funny that the game was considered so violent. Compared to current games it looks so naive.

Were you able to grab any assets from the coin-op?
Yes we did try to hack the graphics from the ROMs. For the Amiga and ST versions the guys grabbed the graphics using a very early screen-capture system and then the artists tidied up the images. The graphics for the Spectrum version, on the other hand, were meticulously crafted pixel-by-pixel by Peter. He used a sprite animation tool developed by John Pickford. I remember Peter wanted the enemies to be able to cartwheel and he spent time imaging this in front of a mirror in the garden so he could get an idea of how the animation would work.

The 48K version doesn't use all the screen. Can you remember the reason why?
It was totally down to saving memory. I actually used the area of memory allocated to the screen display for storing animations. This game was designed to use all 128K and I put all of my energies into the big memory version and it was disappointing to have to cut it down for the 48K version. It was my hope to nudge people to more sophisticated games that used the full 128K of memory.

Overall were you happy with how the Spectrum version turned out?
I was and am very proud of what we turned out. We had such reduced development times and budgets compared with those of today. We only had a few days to experiment and the solutions we came to seem primitive by today's standards, but at the time it was rocket science. Or so we thought.

» [Arcade] "Hey guys, we really love what you've done with the place since our last infiltration."

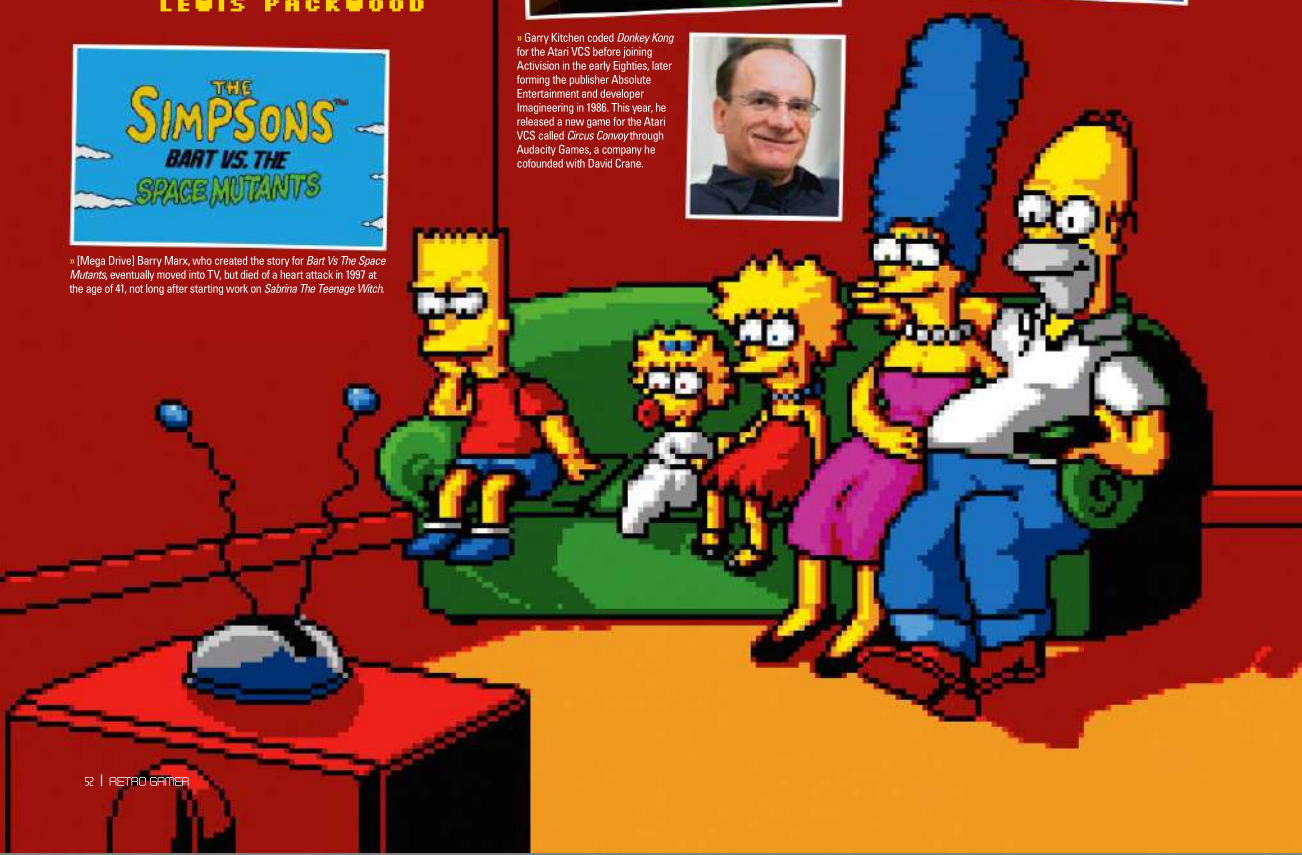
THE MAKING OF THE SIMPSONS™ BART VS. THE SPACE MUTANTS

THIS EARLY VIDEOGAME VERSION OF THE SIMPSONS WAS NOTORIOUSLY, PUNISHINGLY DIFFICULT – BUT THE STORY OF ITS CREATION REVEALS AN EQUALLY PUNISHING DEVELOPMENT SCHEDULE

WORDS BY LEWIS PACKWOOD

» [Mega Drive] Barry Marx, who created the story for *Bart Vs The Space Mutants*, eventually moved into TV, but died of a heart attack in 1997 at the age of 41, not long after starting work on *Sabrina The Teenage Witch*.

» Garry Kitchen coded *Donkey Kong* for the Atari VCS before joining Activision in the early Eighties, later forming the publisher Absolute Entertainment and developer Imagineering in 1986. This year, he released a new game for the Atari VCS called *Circus Convoy* through Audacity Games, a company he cofounded with David Crane.



IN THE KNOW

- **PUBLISHER:** ACCLAIM
- **DEVELOPER:** IMAGINEERING
- **RELEASED:** 1991
- **PLATFORM:** NES, VARIOUS
- **GENRE:** PLATFORMER

Let's begin right at the beginning. Before *The Simpsons*, before the NES, there was a man called Garry with two 'r's. Garry Kitchen wanted to be an artist. He'd been drawing and painting all his life, and in the late-Seventies, he began studying art at his local college. But in his second year, he was suddenly drawn away from his life's passion by the rapidly developing realm of electronic entertainment. He would soon set out on a path that would see him become a leading light in 8-bit game development.

He had begun working part-time for the electronics firm Wickstead Design Associates as a technician, doing odd jobs like soldering circuit boards – and he was so drawn into this world of chips and wires that he switched his college degree to electrical engineering. But his college courses lagged behind what was happening in the real world. This was the age of the new-fangled microprocessor, yet his course was still teaching mainframe programming with FORTRAN. He found he was learning more on the job than at college – and he had to learn very quickly indeed when a big contract came in from Parker Brothers.

"They asked us to engineer a game called *Wildfire*, which was a pinball machine with a microprocessor in it," says Garry. But the programmer they had earmarked to work on the toy pulled out, and Garry suddenly found himself being 'volunteered' to fill the gap. "So in about six weeks, I learned how to program and wrote a 1.5K program to simulate pinball on this device," he says.

Buoyed by this success, Garry developed his programming skills, and soon he had worked out how to program Atari VCS games using an Apple II. This valuable knowledge led to him being tasked by Coleco with creating an Atari VCS port of *Donkey Kong*. "It was incredibly hard," he recalls of the experience. "I mean, it was insane to try to do that game on that machine." He was able to recreate two of the arcade game's four levels, but ran out of both memory and time before he could add the remaining two. "It was a 4K cartridge," he says. "Coleco could have gone to 8K, but they didn't want to spend the extra money on ROM."

Despite that necessary compromise, the game sold phenomenally well – and Garry's impressive coding skills enabled him to secure a deal to establish an east coast studio for Activision. He went on to create Activision games like *Keystone Kapers* and *Pressure Cooker* alongside his brother Dan Kitchen. "And then we left in '85," he says, "because Activision was heading toward Earth to crash into the ocean, and we didn't want to be there for the impact." Along with several other Activision employees, including *Pitfall!* creator and Activision cofounder David Crane, Garry formed the publisher Absolute Entertainment and its in-house development studio, Imagineering.

By this point, the US videogames crash of 1983/84 had hurt Activision badly, and the company had pivoted to making software for home computers. But in 1986, not long after Garry left the firm, a Japanese company called Nintendo launched a console called the NES in the American market – and against all odds, it began selling very well indeed. Garry began badgering Nintendo for the rights to develop games for the machine – but the Japanese firm was reluctant. He recalls Nintendo saying there was no need for a US firm to develop new NES games because there were already hundreds of NES games in Japan. "And ▶

» [C64] The sheer difficulty of *Bart Vs The Space Mutants* meant very few players ever got to see the later stages, like the Springfield Museum Of Natural History on level four.

DEVELOPER HIGHLIGHTS

A BOY AND HIS BLOB: TROUBLE ON BLOBOLONIA
SYSTEM: NES
YEAR: 1989

GHOSTBUSTERS II
SYSTEM: NES
YEAR: 1990

ATTACK OF THE KILLER TOMATOES (PICTURED)
SYSTEM: NES, GAME BOY
YEAR: 1991

> "I mean, it was insane to try to do that game on that machine"
> Garry Kitchen

AY CARUMBA!

BART'S FURTHER ADVENTURES UNDER IMAGINEERING'S STEWARDSHIP

BART VS THE WORLD
NES, 1991

Halfway through the development of *Bart Vs The Space Mutants*, Garry says that Imagineering had a brainstorming meeting. "And we talked about the second game, and I got stuck on this image of Bart skateboarding down the Great Wall Of China." That provided the impetus for the sequel, which saw Bart travelling the globe.

BART SIMPSON'S ESCAPE FROM CAMP DEADLY
Game Boy, 1991

Garry reveals the little known fact that David Crane programmed this Game Boy title, in which Bart strives to flee from a vicious summer camp. "David Crane loved *Escape From Camp Deadly*," says Garry, noting that it was one of David's favourite games to work on. It reviewed well, too, scoring 92% in *Total!* magazine.

BART VS THE JUGGERNAUTS
Game Boy, 1992

This game sees Bart competing in a game show called Juggernauts USA, which is similar to *American Gladiators*. To progress, he has to win cash by doing various challenges, such as completing an obstacle course in the Kwik-E-Mart or navigating an electrified floor set by Dr Marvin Monroe. It was less well-received than *Camp Deadly*.

BARTMAN MEETS RADIOACTIVE MAN
NES, 1992

Imagineering's third and final *Simpsons* NES game sees Bart being dragged into the pages of a comic book, transforming into his alter ego, Bartman. Some stages allow Bart to fly, and he can also shoot laser beams from his eyes by collecting lightning tokens. He's a bit tougher, too, with a generous five hit points.

then they told us that the only development systems for the NES are in Japanese and cost $35,000 each. And we said, 'Well, what if we made our own development system?' So in a couple of months, David Crane whipped up a beautiful design for a development system with a debugger, and all this great stuff. We ended up becoming the first company in North America to be licensed to program games on the NES – and we became the source of development systems for a lot of US developers. [Selling development systems] wasn't a profitable business, because we made them by hand, but it really did help a lot of developers get started in North America on the platform."

Meanwhile, Greg Fischbach – the president of Activision International – had also seen the promise of the NES. "Greg went to management at Activision and said, 'We should support Nintendo's system,'" recalls Garry. "And Activision said, 'Are you a fool? We're out of the videogame business, we're doing computer software now.' So he said, 'Well that's pretty short-sighted,' and he left and started a company called Acclaim." Acclaim became the first US company to receive a licence to publish NES games.

Later, in around 1989, Garry received a phone call from Greg. "He said, 'Watch *The Tracey Ullman Show,* and watch these vignettes of this cartoon, and think about whether you can make a videogame,'" Garry recalls. "So I watched it. And then I called my buddy Barry [Marx], who I'd gone to college with. He was a creative writer, a brilliant writer. I called him and I said, 'Barry, you ever seen this thing *The Simpsons* on *Tracey Ullman*? And he gave me a ten-minute dissertation on what it was, who created it, all the characters. And I said, 'What are you doing now?' He said, 'I work for DC Comics.' And I said, 'You want a job?' So I hired him." This all took place shortly before *The Simpsons* was spun-off as a standalone television show in December 1989, and Greg Fischbach had the foresight to realise it would become immensely popular. "One of Greg's brilliant talents was licensing," says Garry. "He could tell when something was going to be a great licence before it was a big hit."

With Barry in place as creative lead, he, Greg and Garry flew out to Los Angeles to meet with *Simpsons* creator Matt Groening and the show's producer James L Brooks at Fox TV. "We brainstormed with them for a few hours," says Garry. "And of course, they fell in love with Barry, because he knew everything." After the meeting, the Imagineering team worked on a few proposals for the game, and the one that stuck was a story about Springfield being attacked by space mutants. The key idea was a pair of X-ray specs that allowed Bart to see through the disguise of space mutants hiding in human form, specs that were inspired by gimmicky adverts at the back of comic books. "We thought that's the type of thing that Bart Simpson would have mailed away for," says Garry. Intriguingly, the idea is remarkably similar to the 1988 John Carpenter film *They Live,* in which 'Rowdy' Roddy Piper is able to see aliens posing as humans by wearing special sunglasses. But the similarity is pure coincidence, says Garry: he only heard about the movie years later, when David Crane heard of its existence and pointed out its surprising similarity to *Bart Vs The Space Mutants.*

With the story in place, work could begin – but the Imagineering team faced a punishing schedule. "We had less than six months to do it," says Garry, "and it was incredibly ambitious." Work began in around May 1990, with Greg hoping that the game could be ready in time for Christmas. And as an added complication, all the characters and music had to be approved by Fox along the way. "I threw an incredible amount of staff on it," says Garry. "I took people off other projects, I paid people overtime – which was unheard of in the game industry at that point – as I needed them putting in 80 hours a week, and I couldn't ask them to do it without compensation." Four programmers were working

» [Mega Drive] UK firm Arc Developments, made up of former Elite employees, handled the conversion of the game to the Sega Mega Drive, as well as the conversions to the Master System and Game Gear.

» [NES] In a neat touch, calling Mo's Tavern will result in Bart making various different prank calls using different names.

» [NES] The skateboarding section isn't quite as nightmarish as the infamous speeder bike level of *Battletoads* – but Jimbo's annoying zigzagging up and down the screen is certainly rage-inducing.

» [Mega Drive] The visual style of the Mega Drive conversion is markedly different from the NES one, although the gameplay remains virtually the same.

on the game full-time, with the team swelling to ten to fourteen people on occasion.

Garry programmed the game's first level himself, as well as the fifth stage in the nuclear power plant, while other team members worked on the remaining levels. This helps to explain the variation in gameplay between stages, and in particular the puzzle-heavy first level, which is perhaps reminiscent of Imagineering's *A Boy And His Blob,* a game that Garry had worked on with David Crane. "I wanted more than just run and jump up and hit mushrooms," says Garry. "I wanted more thought in it." Garry notes that in later levels, the puzzle aspect disappears almost entirely. "I think the group didn't have the time to continue the puzzle solving deeper into the game."

The team didn't receive a preview screening of *The Simpsons* TV series, but they watched each of the episodes as they aired, and tried to include as many references from the show as they could, like Bart's prank phone calls to Mo the bartender. Fox was generally happy with the builds of the game Imagineering sent its way, but Garry says that Nintendo Of America's Howard Lincoln had feedback on the feel of the jump. "I consciously didn't want to have it feel exactly like *Mario*," says Garry. "And [Howard] didn't like that. He said, 'Make it feel like *Mario*!' Well, I didn't want to rip off Nintendo, I didn't want to make it feel like *Mario.* And at that point, if I'd changed the feel, it would have changed a lot of the gameplay – where objects are and jumps that you had to make. So I probably tweaked it a little for his satisfaction."

Unfortunately, *Bart Vs The Space Mutants* was nowhere near ready by the original deadline of October 1990. "Greg wasn't happy," recalls Garry. "He really wanted to make Christmas, but it was an impossible task." Work on the game was eventually completed in around December, and the game hit store shelves in North America in April 1991, ahead of a European release in December the same year. Despite missing the US Christmas window, Garry remembers the game "sold like crazy", and conversions for the Amstrad CPC, Atari ST, Commodore 64 and ZX Spectrum arrived in late-1991, followed by versions on the Mega Drive, Master System and Game Gear in 1992.

The most common feedback the team got was that the game was too hard, says Garry. "It wasn't well tweaked," he laments. "Now, I think the first level was pretty good, because I spent a lot of time tweaking it, but I think the middle levels, I don't think they got tweaked enough – I don't think there was enough polish on those. And then the fifth level I thought was really good, but no one ever played it because they couldn't get past all the other levels!"

Still, overall he was mostly pleased with how the game turned out. "I thought it was a good effort. I think it could have been better. I'd say we needed another six months to really tighten it up, but we didn't have it." Thankfully, the team had several more chances to get it right across a slew of sequels – and this time, with slightly less punishing development schedules. ✱

» [NES] The second level sees the space mutants switch to collecting hats instead of purple things to power their machine, meaning you'll have to gather up all the hats you can find to stop them.

» [NES] This section on the second level, where you have to negotiate miniscule moving platforms over a stretch of one-hit-kill wet cement, is probably the game's nadir.

» [ZX Spectrum] The Spectrum version of *Bart Vs The Space Mutants* was published by Ocean in the UK.

SMART BART

THE PUZZLES AND SECRETS OF THE OPENING LEVEL

Whereas later levels mostly stick to straight platforming, the first level of *Bart Vs The Space Mutants* is absolutely packed with hidden mechanics and puzzles. Bart's aim is to find and dispose of 24 purple objects to stop the space mutants from using the power of purple to fuel their nefarious machine. But he can do that in various ways, from painting things red with his spray can to draping objects with clothes from a washing line.

Early on, you can use a coin in a phone box to make a prank call to Mo's Tavern, prompting him to leave the building in a rage – and giving you the chance to spray paint his purple shirt. And if you hang outside the movie theatre until the clock reads 400 or 200, a boy in a purple T-Shirt will leave the showing, ripe for spray painting.

There are several shops where you can buy useful objects, too. Purchasing a spanner from Tool World will let you loosen a fire hydrant, causing a fountain of water to wash the wet paint off an awning. And Mel's Novelty Hut will sell you cherry bombs and rockets: the former can be used to scare off a purple bird in a pet shop window, while the latter can be fired at purple blinds in the Springfield Retirement Castle. You can also fire a rocket at a statue of Jebediah Springfield to scare off a bird, and you'll get a message from old Jeb himself in the process, referencing the story about his stolen head.

Finally, there's a nifty rocket-related secret at the Kwik-E-Mart about halfway through the level. If you carefully line up and fire a rocket at the 'E' in the sign, you're rewarded with a shower of extra lives. And considering this game's extreme difficulty, you will certainly need them.

Slap Fight MD

REGRETS, I'VE HAD A FEW

» Mega Drive » 1993 » Toaplan, MNM Software

I've mentioned some of my gaming regrets in the past, but one of the ones that haunts me today is not buying *Slap Fight MD* when I had the chance. I remember seeing it years ago in the Video Game Centre and I baulked at paying the £60 asking price. I had a few more chances over the years, but it was always more than I was willing to pay.

Nowadays *Slap Fight MD* commands a ridiculous price if you want to own an original copy and you'll be hard-pressed to find it for less than £250 if you want it in good nick. That's far too much money, right? And yet, part of me is still tempted to sell a few games or do some trades, anything so that I might get my hands on this coveted shooter that has eluded me for so many years.

If you've not played *Slap Fight MD* before it's worth noting that it's actually two games in one. First up is a surprisingly faithful port of the original 1986 game and while it's good – *Slap Fight* is a great shooter after all – it's not a patch on the other title that is included. Perhaps realising that a seven-year-old game wouldn't cut it on a modern console, a remaster featuring brand-new levels, artwork, weapons and music by the legendary Yuzo Koshiro was commissioned and it's bloody brilliant.

Coded by the talented Mikito Ichikawa, it's a clever little shooter which takes the core DNA of Toaplan's original blaster but adds new layers to it, making it even more strategic in the process. For example, unlike the original game when you pick up wing enhancements you can jettison them, creating bombs, which simply offers more options when things get hectic. There's lots of neat little touches like this that allow *Slap Fight MD* to stand tall with the likes of *Gleylancer*, *Thunder Force III*, *Gynoug* and countless other exceptional Mega Drive shooters.

I'm now Facebook friends with Mikito Ichikawa, which is cool in itself, but I've never brought up my love of his game directly with him because I'm embarrassed that I don't own it. Maybe I need to pick up a copy after all…

HIGH SCORE
68000
AREA 1- 0
SCORE
20660
AREA 1-13
SPEED
SHOT
SIDE
WING
BOMB
H.MIS.
SHIELD

A TRIBUTE TO Falcom

FORTY YEARS OLD AND STILL A FORCE TO BE RECKONED WITH TODAY, NIHON FALCOM HAS ALWAYS STOOD PROUD AS A BEACON OF INDEPENDENCE AND CREATIVITY IN ITS FAVOURED GENRE – THE RPG. WE SPOKE TO COMPANY PRESIDENT TOSHIHIRO KONDO ABOUT THE JAPANESE DEVELOPER'S PAST, PRESENT AND FUTURE

WORDS BY KERRY BRUNSKILL

Since the company's creation in 1981 Falcom has released over 80 games – an average of at least two for every year it has existed – and it's no exaggeration to say certain genres would be very different today without the developer's continuing influence. But as large as it now looms over the RPG genre its beginnings were small, releasing a smattering of now-forgotten titles across a range of long-gone Japanese computers, just another fledgling company trying to find its voice in what was then a brand-new medium.

And then in 1984 Falcom created *Dragon Slayer*, an overhead action RPG available on two types of floppy disk or cassette tape, depending on the format. That game didn't just sell well or put Falcom on the map, it changed gaming forever, *Dragon Slayer*'s ideas and influence reaching international shores even before the game or any other by Falcom did.

In Japan Falcom's early success on home computers blossomed into canny business decisions and partnerships that saw its most popular games released across a variety of Nintendo and Sega hardware as well as NEC's PC Engine, all reimagined and redesigned to better suit the technology running them and the slightly different expectations of these new customers. For a time Falcom titles came bundled with order sheets offering fans anything from T-Shirts and keyrings to floppy disk folders and mouse mats, and official manga, anime and drama CDs were produced for *Ys*, *The Legend Of Heroes*, *Xanadu* and beyond.

Overseas it was a very different story. Scattershot releases were handled by an array of Japan-curious publishers with little care for consistency or continuity, and in the early days players had to make do with whatever they could find.

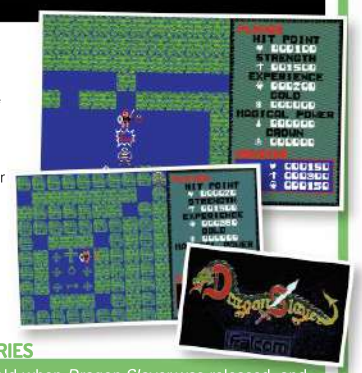
Yet in spite of all this Falcom's titles still drew a small but faithful following, with shared murmurings across forums and fansites building from a trickle of plays of old untranslated PC games into a flood as XSEED brought titles once thought impossible to be localised for English-speaking people all over the world. Fans worldwide now eagerly await news of the long-running developers latest works, clamouring to play not only its new games but hoping for official translations of older titles as well.

In many ways the Falcom of today continues to do what it has always done so well: capitalise on its successes, shift without sentiment across formats and styles as its fans do, and create its own trends. After 40 years of independence the company has not only survived where so many others have fallen, but gone from strength to strength, rightfully known for producing critical hits and commercial successes in every style of RPG imaginable – and it has no intention of stopping.

"There will always be trends in game design, and the hardware used to play will always change with the times," Toshihiro Kondo, Falcom's company president tells us. "We actually enjoy these types of changes, and want to be proactive in regard to them. In addition, we want to carry on the Falcom traditions that have allowed us this longevity, like doing what we do best, never cutting corners yet still being careful not to spend too much time on any one thing. We will continue doing our best so that we can always release games that we are proud of."

DRAGON SLAYER

VARIOUS, 1984



"DRAGN [sic] SLAYER IS UNLIKE ANY OTHER GAME YOU HAVE PLAYED ON YOUR COMPUTER!" boasted the title screen – and for once this was more than simple marketing bluster. More than 'just' a huge success for the rookie computer game company at the time, it has been credited with not only helping to establish but invent the entire action RPG genre. Even a very young and computerless Mr Kondo had heard of the game.

KONDO'S MEMORIES

I was nine years old when *Dragon Slayer* was released, and unfortunately, I didn't have access to a PC that could play games at home. I was interested in the game itself, but I was still only vaguely aware of the existence of personal computers. That said, despite all that, even I had heard of *Dragon Slayer*, so there's no doubt that it was indeed a big deal.

XANADU: DRAGON SLAYER II

VARIOUS, 1985

After *Dragon Slayer*'s success the obvious thing for Falcom to release the year afterwards would have been a safe and similar sequel that cautiously trod over popular ground. It would maximise Falcom's potential profits and not risk a stumble that would give fickle customers a reason to look elsewhere for their action RPG fix. Falcom chose not to do this. Instead it released *Xanadu: Dragon Slayer II*, a beguiling mix of almost platformer-like side-scrolling exploration within claustrophobic two-tone environments coupled with overhead real-time battles against hordes of enemies more than capable of surrounding the blank-slate adventurer with ease. As unusual as it was – and still is – the game swiftly became an enduring classic, with players unable to resist its enthralling combination of the in-depth pleasures of classic RPG stat-reliant character abilities with the raw thrills of arcade-style survival through its maze-like depths.

YS I: ANCIENT YS VANISHED

VARIOUS, 1987

The first half of Adol's debut two-part epic struck a chord wherever it went, the hero's now famous bump-attack behaviour and rocking soundtrack giving Falcom's game an audience beyond the usual lovers of swords and sorcery – and some rivals too. Mr Kondo talked to us about why Adol has endured in the face of all competition.

KONDO'S MEMORIES

I think that's because the charm of the original was such that it allowed the characters to endure. Things like the setting, which included over 100 adventure diary entries left by Adol, or the sad story that leaves you somewhat hopeful, contributed to this. We also have story elements that have sort of become legend thanks to the users, in addition to the original elements. For example Adol will always be shipwrecked, and Dogi will always crush walls. In a way, I think the development staff and the players are enjoying the game together, and that's one of our strengths.

ESSENTIAL YS FACTS

Cool stuff about the classic game

1. Counting ports and remakes, the original *Ys* has been released on well over a dozen different formats.
2. The eponymous ancient land's pronounced "eese", like "geese". Yes, even though the Master System port wrote "Y's" on the cover.
3. The land of Ys is a real (fictional) city. Legends state it was located on the coast of Brittany before it was swallowed by the sea.
4. Mastery of the bump-attack system is necessary, but simple: the trick is to shoulder-barge enemies rather than tackle them head-on.
5. For all the focus on the Ancient Land Of Ys, Adol doesn't actually get to go there until the second game.

SORCERIAN

VARIOUS, 1987

Sorcerian may have released the same year as *Ys*, but the two games couldn't be more different if they tried. *Sorcerian* allowed a band of user-created heroes to go on a free-form campaign of self-contained micro action adventures; these characters would not only gain experience over time but visibly age too. The end result was a game that often felt like a traditional tabletop RPG viewed through an arcade gamer's lens, a concept that has garnered it as many puzzled looks as it has lifelong fans.

KONDO'S MEMORIES

[...] Japanese gamers have been divided into two groups: those who enjoy the freedom of the system, and those who aren't fans of it and won't touch it. Many who like *Sorcerian* are quite passionate about it. Conversely, there are Falcom fans who completely avoid it. I like it when there is a wide variety of games available to choose from, and someday, I'd like to take on a title like *Sorcerian* again.

DRAGON SLAYER: THE LEGEND OF HEROES

VARIOUS, 1989

It took seven years of unforgettable industry-shaking experiences and almost constant innovation before Falcom finally gave in and released a game that looked and played more in line with what most people would consider to be a 'traditional' RPG in the *Dragon Quest* mould; the sword-wielding Prince Selios walking over the grassy green overworlds of the magical land of Iselhasa with his small band of friends in tow and getting into first-person battles against colourful slimes. Yet not even this game could escape Falcom's irrepressible need to embellish an established genre, and so its superficially straightforward story of dead kings and terrible evil is peppered with fleshed-out friends and foes alike, every town and castle containing quirky villagers and enticing plot threads – a detail that would eventually become one of *The Legend Of Heroes* series' defining features.

DINOSAUR

VARIOUS, 1990

Falcom's only first-person dungeon crawler (outside of its own 2002 remake) is a sombre affair filled with death, dark curses and sacrifice. *Dinosaur* forgoes the usual focus on traps and tricks and instead trusts in its strong plot, talkative cast and gloomy atmosphere to keep players hooked. Battles are represented by cards, allowing detailed artwork to shine while still showing enemy numbers and formations on limited hardware.

TIME FOR ADVENTURE

There is plenty to do while visiting Zamhamn

MAYOR

There's simply no adventure without him. He's the first port of call at the beginning of the game, there to explain the current situation and also grant passage into the forest beyond.

WEAPON

Any team of adventurers, from muscular killers to lithe thieves and powerful magicians, will find something of use here – swords, rods, cestus, the weapons dealer has it all.

ARMOUR

The armour seller is equally well stocked with shields, robes, gauntlets and more. At the prices he sells them at though equipping everything he has in stock is a slow process.

ENCHANGE

The crystal rods and silver bows in his shop are incredibly useful, but early on they're little more than tantalising treasures to look at, but not touch.

MARVELER

Recovery items are sold here, making this the town threshold a party is sure to cross most often. He can also cure status effects and even revive the dead.

INN

All towns must have an inn, and Zamhamn's is no exception. 5GEM is all it costs for a room for the night. So put your head down and have a rest.

KONDO'S MEMORIES

[...] I heard from my boss that at that time, Falcom was actively taking on a variety of new projects and people were enjoying the results of that. Among those, *Dinosaur* was a particularly unique title for the fans then. I also think *Dinosaur* was unlike anything else, but I heard that it was an idea that came from the staff at the time. This was in the midst of the *Ys* and *Dragon Slayer* series, so I think they must've had some pretty unique people at the company who pitched it!

POPFUL MAIL

VARIOUS, 1991

After almost a decade of presenting players with brave heroes wearing serious expressions and damp dungeons Falcom completely changed tack and released *Popful Mail*, self-described as a 'Magical Fantasy Adventure' awash with cheeky characters and anime-friendly derring-do. Famously reworked for the Mega CD and then later translated into English by Working Designs, it would appear the planned *Sister Sonic* makeover was, at least on Falcom's side, little more than a brief idea long gone and a sign of a different era's attitude towards localisation.

KONDO'S MEMORIES

"This is the first I've heard of [*Sister Sonic*]! It's often the case that you want to change a title when you license it out, and in many cases simply translating the title into English is not enough, while in other cases, there may be rights issues depending on the region. For now, as far as I know, we generally just respect the feedback of local publishers. For example, in the *Trails* series, the names of the characters were initially changed for the English version. In *Ys*' case, Adol's name was originally different in the North American version. Recently there has been talk of changing it back to the original, and that makes me feel like times have certainly changed."

THE LEGEND OF HEROES III: THE WHITE WITCH

VARIOUS, 1994

While never seeing the same success in English due to the questionable quality of its sole English PSP port, in its original Japanese *The Legend Of Heroes III* is a memorable pilgrimage filled with charming characters following in the footsteps of the enigmatic White Witch of its title. During the game's development a certain Mr Kondo joined Falcom's staff…

KONDO'S MEMORIES

"[…] On my first day specifically, I organised a negative/positive film that was to be lent out to magazine companies. […] My seat was right in front of the executive director, so I couldn't let my guard down and I had to keep my back nice and straight as I organised the film. This went on for about a week, until I became involved in the debugging of *Ys*. There are a lot of stories there as well [laughter]. That was around the year I became involved with *The White Witch*."

VANTAGE MASTER ONLINE

PC, 2002

By this point in time Falcom had a whole stable of strong brands at its disposal, but the idea of resting on its laurels just wasn't part of the company's DNA. *Vantage Master Online* is a board game-like tactical strategy game, where two summoners vie for control of a hex-based board, and like all the very best it's simple and complicated all at once. This full official English translation of *Vantage Master V2* (1997) was created by Falcom itself, and was available to download from its official website for many years, for free, without any catch. Why? Not even Falcom is sure how it came about, but the intent was always pure.

KONDO'S MEMORIES

"My memory is a little fuzzy when it comes to this one as well, but it seems Mr Kato, the president of Falcom at that time, had an acquaintance translate it into English. I'm not sure if he actually intended to release an English version or not. There was a while there when they were trying to figure out what to do with it, and I remember he mentioned, 'We could just give it away for free.' It was a game with a lot of originality, so I think he just wanted to get it into the hands of as many people as possible."

GET THE VANTAGE

Key aspects of Vantage Master Online

1. This is the first and only English-language release of any game in the *Vantage Master* series, ever.
2. There are 27 Masters in total, each possessing their own strengths and weaknesses. A whopping nine of these are cameos from other Falcom titles.
3. Summoned monsters are called Natials. Beyond their elemental rock/paper/scissor vulnerabilities they must also play close attention to terrain types.
4. This is because Masters can use magic to raise/lower the water level of the stage, trapping swim-averse Natials or giving their own an advantage.
5. Masters can theoretically summon Natials forever, so the real goal is to reduce the opposing Master's HP to 0.

YS VI: THE ARK OF NAPISHTIM

PC, 2003

Ys VI marked a bold new direction as well as a fresh new look for the popular series, its mix of pre-rendered 2D characters moving within 3D environments becoming the company's signature look for years to come. It's a self-assured return for the series, updating Adol's moveset without ever losing sight of his original appeal.

KONDO'S MEMORIES

Ys VI's development was carried out mainly by members that had worked on *Ys I Eternal*, *Ys II Eternal* and the remake of the original. We were told by the company to work on making *Ys II Eternal*, but as we had proposed that they please let us work on *VI*, it was clear our desire to work on something new was also strong. On the other hand, this was a series with a long history, so there was also a desire to keep the good qualities of the original alive. *Ys VI* is the result of the fusion of those two things.

OLHA: Priestess Of Alma and niece of the Rehda village chief, Ord. She's responsible for Adol's beach rescue and recovery, despite the current hostilities between her tribe and outsiders.

HEROES ASSEMBLE

KEY CHARACTERS OF YS VI

ADOL: The red-haired hero washes ashore on the Canaan Islands, unconscious and alone. This sets off a chain of events that see him become the saviour of friends and the world alike.

ISHA: Olha's younger sister's a kind girl at heart, and curious about Adol's lack of long ears or tails. She's also beset by unwanted visions of terrible monsters.

ERNST: A Romun naval commander with a dark desire to obtain the titular Ark Of Napishtim for himself. Many of the Canaan Islands' problems are down to his scheming.

GEIS: An intimidating halberd-user who has no qualms about crossing blades with Adol. He has his own agenda on the islands, and will suffer no interference.

THE LEGEND OF HEROES: TRAILS IN THE SKY

PC, 2006

This was initially sold as *The Legend Of Heroes VI: Sora No Kiseki* without any outward hint Estelle and Joshua's tale would go on to become the all encompassing multi-arc, multi-format adventure it has become in the years since. The English translation was once thought to be impossible due to the sheer volume of text involved and in practice the scale of the task took a serious toll on the mental and physical health of those involved.

KONDO'S MEMORIES

We were still pretty new when we started the series, and it basically took all of our energy just to complete the tasks in front of us. We had already spent too much time in development for *Trails In The Sky* trying to make it something great, and the president had begun saying that we needed to stop in the middle of it all and release something (which ultimately turned out to be *Trails In The Sky FC*). In that way, we got them to allow us to just do our best to create our titles, while President Kato handled the other managerial tasks.

BRANDISH: THE DARK REVENANT

PSP, 2009

This PSP exclusive was indicative of another turning point in Falcom's long history – its complete dedication to a non-PC format. To this day its moody dungeon-diving ARPG *Brandish: The Dark Revenant* has been released on nothing else. Although the game's a full 3D remake of the 1991 computer classic very little was changed, Falcom choosing to let *Brandish*'s quirky behind-the-shoulders point of view find new fans or reach out to old ones on its own merits.

KONDO'S MEMORIES

[...] We worked on those titles because we believed that we could get the people who played then, to play again. But titles like *Brandish* have some very passionate fans, and that did have us worrying more about things like, 'Is a console release going to be OK?,' 'Will the game be OK to play without a mouse?' and, 'Will younger players really be interested in such a different system of gameplay?'

YS: MEMORIES OF CELCETA

VITA, 2012

It may have taken 19 long years, but in 2012 fans finally got something they'd always hoped for – Falcom's own take on the events of *Ys IV*. This full 3D team-based effort was a huge departure from the previous attempts at telling Adol's adventures in Celceta and was also a fantastic opportunity for Falcom to embed later events into earlier works. It also represented another change: overseas fans could now expect, rather than hope, to play a new *Ys*.

WHAT'S THE STORY?

Unravelling Adol's tale

Ys IV has had a long road to canonicity: unlike previous entries that had one definitive Falcom release that was then spun off into various ports, Tonkin House and Hudson Soft produced two unique takes on a story there was no traditionally official version of for the Super Famicom and PC Engine, titled *The Mask Of The Sun* and *The Dawn Of Ys* respectively. To further muddy the waters the Super Famicom game was deemed to be canon but fans more readily embraced the PC Engine game's take on events, leaving Adol's fourth adventure with an awkward question mark for years to come.

KONDO'S MEMORIES

We constantly use games from overseas as points of reference, but as we are from Asia, we aren't able to do what they do in the West. First of all, we try to do the best we can with our own original approach. After that, we try to incorporate the things we felt were good. During the production of *Ys IX* and other titles, since we had so many opportunities to interact with people from abroad, we did feel a bit influenced by them in terms of design, setting and open-world structure.

TRAILS OF COLD STEEL

VARIOUS, 2013

Trails Of Cold Steel, the seventh game in the *Trails Of…* saga, was a direct continuation of all that went before as well as the beginning of a brand new four-game arc. The complex web of ongoing events now turned their focus towards the Erebonian Empire and centred on a brand-new cast of teenaged characters, Class VII of Thor's Military Academy. Yet even with this huge shift in location, familiar faces and references to places and powers elsewhere could still be found, cementing the new series' place within the wider world fans had by this point spent years investing in. In fact so beloved was this series-within-a-series world it spawned its very own successful stage musical.

KONDO'S MEMORIES

The whole thing was made possible thanks to an enthusiastic proposal made by the company that hosted the musical. I hope to continue making the kind of games that elicit these types of proposals. *Trails In The Sky* seems like it would be well-suited to the musical format, so I'd like to see that.

TOKYO XANADU

VITA, 2014

A marked and deliberate departure from everything Falcom has done before, *Tokyo Xanadu* doesn't take place in a strange fantasy world or a dark stone-clad dungeon but on the streets of a fictionalised version of Japan's capital city, with characters just as likely to use a mobile phone as they are to cast magic or swing a sword. The name makes it easy to believe the game was intended to be a revival of Falcom's *Xanadu* series, but in fact it was only supposed to be a stand-in.

KONDO'S MEMORIES

Originally, the name *Tokyo Xanadu* wasn't the official title, and was just a name we used to reference the concept within the company. [...] In order to create something new that had never been done before and tackle a more modern theme, we used the key word 'Tokyo', which is a far cry from themes usually associated with Falcom, along with the word 'Xanadu', which was considered a Falcom icon. It was a statement of intent to work on this fusion. It's just that *Tokyo Xanadu* elicited so many reactions both inside and outside of the company that it wound up being adopted as the official title.

YS IX: MONSTRUM NOX

PLAYSTATION 4, 2019

The most recent *Ys* game expands on the action of old by adding verticality into the mix; Adol and friends are able to glide, dash and run up walls with ease. Yet for all that's been changed Falcom have always taken care to guard the core of *Ys* with care.

KONDO'S MEMORIES

[...] We try to avoid taking control away from the user. We employ a variety of methods to have controlling Adol directly translate into the user's experience, and to have the user's feelings translate into what Adol is feeling. Also, the stories of *Ys* have always been about meetings and farewells. Farewells are always a bit painful and sad, but they also serve as a new beginning and build expectations for what comes next. I believe the comfort that comes from this is what makes *Ys*, *Ys*.

CLASSIC MOMENTS

Super Street Fighter II Turbo

» **PLATFORM:** ARCADE » **RELEASED:** 1994 » **DEVELOPER:** CAPCOM

You thought you were good at *Street Fighter* – Bison had long ceased to be an obstacle, and your friends had been reduced to celebrating victories in single rounds. With *Super Street Fighter II Turbo*, Capcom put you back in your place. This time around it was clear that the computer fighters were no joke, as they set about emptying your wallet without even a shred of mercy. Lesser players put in a credit, got wrecked once and never came back. But now, you've managed to do what seemed impossible. Not only have you reached Bison, you've done it without losing a match.

As the two fighters square up for the final showdown, something is off. Bison's portrait is blacked out and his name isn't showing. Suddenly a new fighter glides in from behind you, someone you recognise from the intro sequence. In a flash of white, the newcomer reduces the formidable final boss to a crumpled heap. You've just met Akuma for the first time – prepare to be destroyed.

BIO

The success of *Street Fighter II* prompted Capcom to develop a variety of arcade upgrades through the early Nineties, with this being the fifth and final version of the game. *Super Street Fighter II Turbo* combined the new characters of its predecessor with the speed of *Street Fighter II Turbo*, and added a variety of new moves as well as the Super Combo. Capcom elected not to bring this revision to the mainstream 16-bit consoles despite it being technically feasible, so the 3DO version was the only worthwhile home option until it was released in a compilation for PlayStation and Saturn.

MORE CLASSIC SUPER STREET FIGHTER II TURBO MOMENTS

First Impressions

Super Street Fighter II Turbo only has two women in its character roster, but Chun-Li and Cammy are both very popular. Knowing that, Capcom elected to add them to the updated introduction of the game, cutting between them and the enormous Ryu sprite to provide both distinction from the previous version and a pleasing close-up for the fans.

Super Slam

One of the most impressive Super Combo moves in the game is Zangief's Final Atomic Buster. You'll need to spin the stick twice and hit punch to pull it off, but the reward is immense – Zangief hits a German suplex, rolls through for a second one, then leaps into the air for a spinning piledriver to do enormous damage.

Flashy Victory

The introduction of the new Super Combo moves was an inspired addition, giving every character a way to deal massive damage that could even up one-sided matches or provide an impressive way to finish an opponent. It was worth saving for the end too, as a big sunburst signalled to other players that you'd just deployed the move to devastating effect.

Too Predictable

While winning with a Super Combo feels great, you know what's even better? Not getting hit with one. When you get good enough to recognise the moment an opponent is most likely to bust out the biggest weapon in their arsenal, then block it to render it effectively wasted, you will feel like a genius – especially if you then win.

THE MAKING OF Litil Divil

WITH DETAILED ANIMATIONS, HIGHLY VARIED GAMEPLAY AND A STRONG FOCUS ON HUMOUR, LITIL DIVIL STILL STANDS OUT FROM THE CROWD. WE TALK TO SOME OF THE ORIGINAL TEAM TO DISCOVER HOW THIS YOUNG GROUP OF TRADITIONAL ANIMATORS, ARTISTS AND PROGRAMMERS PULLED IT OFF

WORDS BY NIALL O'DONOGHUE

IN THE KNOW

- **PUBLISHER:** GREMLIN GRAPHICS, PHILIPS INTERACTIVE MEDIA
- **DEVELOPER:** GREMLIN IRELAND
- **RELEASED:** 1993
- **PLATFORM:** DOS, AMIGA CD32, CD-I
- **GENRE:** ACTION

» Jerr O'Carroll is art director at NIIT.

» [PC] Phil was heavily influenced by Disney animated films like *Pinnochio*, his fellow artists and British illustrator Rodney Matthews for *Litil Divil*.

Journeying through hell is a classic narrative trope, stretching back all the way to *Dante's Inferno*. However, we can't recall the last time someone did it just to pick up a pizza. Enter Mutt, the unlucky protagonist of *Litil Divil*, who's drawn the short straw and must travel through the Labyrinth Of Chaos to obtain the Mystical Pizza Of Plenty for his buddies in the underworld – with extra anchovies and capers, of course.

Litil Divil is something of an oddity: stuffed full of cartoony gags, arcade-like minigames and heaps of quality animations, it lies somewhere between an interactive cartoon in the style of *Dragon's Lair* and a surprisingly tough dungeon crawler. Its origins can be traced back to Jerr O'Carroll, art director for NIIT with previous credits on series like *Tomb Raider* and *Heimdall*.

Jerr worked for Sullivan Bluth Studios, an animation company established in Dublin by renowned animator Don Bluth, before joining Emerald Software, an Irish development studio founded in the late-Eighties. Jerr began work on *Litil Divil* – the title came from Jerr's mother, who called him a 'little divil' growing up – during the downtime after Emerald's versions of *Michael Jackson's Moonwalker*. He had previously animated demonic characters for a sequence in the film *All Dogs Go To Heaven* when working at Sullivan Bluth and drew upon this for inspiration.

"The idea was to have lots of tunnels that would be a maze, gaps to jump over, or pits – not too sure – which linked together separate rooms of hell," Jerr tells us. "I really wanted something chasing you, so we had a spinning skull which revolved faster as whatever was chasing you got closer. The idea, like many good horror films, is [that] you don't see what's chasing you, it's all in your imagination."

> **"I really wanted something chasing you, so we had a spinning skull which revolved faster as whatever was chasing you got closer"**
> JERR O'CARROLL

After Emerald Ireland closed in 1991, Jerr was invited over to England to continue working on *Litil Divil* with Gremlin Graphics. He worked alongside programmer Ged Keavney, with some support from artist Jason Gee. However, Jerr had issues with a member of Gremlin's management team and disliked suggested changes to the game, like the main character becoming a pizza boy. "I really loved what we'd done, was proud that we had something that looked as it did, and [that] was why I was so pissed off when, as I saw it, interference [came] from upstairs to add on what I thought were silly ideas," Jerr says. He quit and formed The 8th Day alongside Ged, going on to develop the *Heimdall* series of RPGs, leaving the development of *Litil Divil* on hold.

However, Gremlin had a group of developers perfectly suited to the task in their neighbouring isle. Cinemaware established a short-lived Irish office in the early Nineties, after which Cinemaware developer Ian Hadley set up Pixel Productions. The company was subsequently acquired by Gremlin Graphics in 1991 due to Ireland's "good working conditions" and "well-educated workforce", according to an article in *The One* magazine's January 1992 issue. Its first title, the adventure game *Plan 9 From Outer Space*, was based on the cult classic Ed Wood movie and was animated by Nicola Sedgwick, a veteran animator. Gremlin Ireland continued to acquire talented artists, some of which were brought over from Sullivan Bluth Studios, and the Sheffield office offered them the chance to work on *Litil Divil*.

"Ian loved it, because Ian – being from Cinemaware – liked the idea of the big interactive cartoon," art lead at Giraffe Games and artist on *Litil Divil* Phil Plunkett tells us. The team took the

DEVELOPER HIGHLIGHTS

SKIDZ
SYSTEM: ATARI ST, AMIGA
YEAR: 1990

PLAN 9 FROM OUTER SPACE (PICTURED)
SYSTEM: AMIGA, ATARI ST, DOS
YEAR: 1992

ZOOL
SYSTEM: AMIGA, VARIOUS
YEAR: 1992

» Phil Plunkett is lead artist at Giraffe Games.

» Dom Regan is the co-owner of 41 Games.

» [PC] Certain types of traps electrocute Mutt, sending him flying into the air like a *Looney Tunes* character.

original framework laid out by the demo – exploring a labyrinthine tunnel network and finding challenge rooms – and began to build it out into a full-fledged game. However, this was a big challenge for this relatively inexperienced team. Ian had created a storybook, but the studio didn't have a proper game designer to fully realise these ideas, according to Phil. Additionally, it took time for the studio's traditional artists to adjust to the limitations of animating for videogames. "They had no concept of pixels or memory or frames. When they were doing animations, they wanted to do 24 frames for an animation, whereas we would do two frames, three frames," Phil recalls. "They had no concept of the limitations of graphics."

Dom Regan, former COO of the EAGL action group at Electronic Arts and co-owner of development studio 41 Games, was lead programmer on *Litil Divil*, working on the game's tunnel system and puzzle rooms, liaising with the art team and acting as an aggregator for what made it into the finished game. Designing challenge rooms often began with concept art, around which developers would create a game mechanic to fit. "Basically, what kind of game can you make in here? How can you make this a game? That's really what it is," Dom recalls.

This resulted in highly varied gameplay concepts. In one room, you need to ride a bucking bronco from an isometric perspective, whilst in another you might need to do a 2D platforming section, explore a maze or even play a bit of tennis. "We relied heavily on the fact that we had a lot of animation and a lot of animation horsepower, so we could ask the animators to make unique animations for different rooms and different situations," Dom says. "So that's how we got these unique gameplay elements in place."

Programmers like Tommy Rolfe, a software engineer who primarily worked on the Amiga version, built all of the game's tools from scratch to implement the game's source artwork and animation in every version of the game. Making the artwork look good was a focus for the team, as well as adding in story elements and gags. "We wanted a lot of humour, because [Mutt] had a lot of

ROOMS WITH A VIEW

SOME OF THE LABYRINTH'S MOST INTERESTING MINIGAMES

SUMO WRESTLING

This is just one of the many combat encounters Mutt faces on his journey, pitting him against a demonic sumo wrestler. Whilst Mutt uses some unconventional tactics, like this impressive roundhouse kick to the face, the solution actually requires you to – quite literally – burst the sumo's bubble.

DRAGON TAMING

Although this is a fairly simple puzzle, it's a good example of how the game integrates humour into its gameplay. How do you get past a dragon statue constantly breathing molten-hot flames? By chucking gigantic gemstones into its nostrils and legging it before they explode, of course!

THE FLOOR IS LAVA

Although this looks an awful lot like *Frogger*, don't be fooled. The floating platforms on the lava have dynamic physics, moving at different speeds and bashing into each other in random patterns. You have to adapt on the fly as you collect a key to unlock the gate at the far end.

SPIDER BATTLE

This is one of the very first rooms in the game and it sets the bar high, with a massive and gorgeously illustrated spider dominating the entire right-hand side of the screen. Poor Mutt has to acquire weapons-grade pesticides to tame this beast, all while stomping on its spider underlings.

CUT-THROAT CHESSBOARD

This unusual minigame is a great showcase for *Litil Divil*'s beautiful animations. Ghostly creatures materialise out of the ground to smother you while a mysterious figure riding a massive eyeball chases you around the board. It's intense, but some well-timed bombs ought to do the trick.

> "Dom just had a natural thing for making games and he was a really good programmer"
> PHILL PLUNKETT

» [PC] Platforming takes some getting used to, no easy feat when monsters are watching hungrily from the swamp below.

» [PC] These troll fights precede every new dungeon in the game, of which there are five in total.

character, so it was more about getting in funny situations for him," Tommy explains. However, the lack of experience and direction at the team meant that creating these challenge rooms was difficult. "One of the problems with the game was that it ended up being, rather than making one game, we're making ten games, because each room was its own bespoke game," Tommy says. "Typically back then, you would make an engine for, let's say a side-scroller, you just make more levels and add bosses and you maybe tweak it. But in this case, each room was its own little game: they're all different."

A surprisingly large amount of *Litil Divil* takes place in the game's labyrinthine tunnel network, where you dodge traps, collect treasure and find challenge rooms and save points, scavenging for food to keep your gradually depleting energy meter topped up. On top of that, the map starts off completely blank, only unfurling as you push deeper onwards. All of this evolved naturally from Jerr's original demo in an attempt to gamify exploration and highlight Mutt as a character, according to Dom. "The concept of the tunnels and the rooms was there, but then they realised, 'Hey, we're spending a lot of time in these tunnels.' So then, it's trying to make it interesting and [make] something happen," Dom says.

As a result, tunnels are stuffed with gags; for example, demonic hands punch you in the face, spiders make Mutt scream and leap halfway across the screen, and falling into pits makes him beat his fist on the floor in disgust. Additionally, Dom was inspired by the graphic display model Mode X popularised by programmer Michael Abrash, the implementation of which allowed him to store additional screens of data on the video card. This made tunnel exploration smooth and seamless, without compromising the game's high-quality graphics.

» [PC] Running out of energy sends Mutt to a macabre torture dungeon, presided over by an unsettlingly cheery figure.

However, Dom has his criticisms looking back. Exploring the labyrinth safely relies heavily on trial and error – for example, you only get punched when walking past certain windows, which look identical to 'safe' windows. "It's random, and random's never good. A real game design has an evolvement and it's a very, very difficult thing to do, but you want to have a progression. So you'd want level five to be really hard but not level one, but I think we just put the gags in, changed it a bit, saw what it was like and did it," Dom explains. "One of the problems you have when you work on the game every day [is that] you're not a good judge of that."

Phil feels that "the game started getting together" when Dom joined the project, saying, "Dom just had a natural thing for making games and he was a really good programmer." Additionally, he's keen to highlight the impact of artist Aidan Walsh. "Aidan was from a traditional animation background and he'd never touched pixels or computer games. He came on to do animation and he just had a natural flair for animating, even in pixels, he was just a great artist – he was like Jerr O'Carroll," Phil says. Additionally, James North-Hearn, then development director at Gremlin, began visiting the studio during development and interviewees credit him with giving the project focus and direction. "James definitely, in the end, was basically making decisions, 'Let's do this, let's not do that,'" Tommy says. "[Development] was very haphazard, the whole thing. Each part of it was very organic, so that was helpful."

Different versions of the game are very similar to each other, bar some minor differences – the Phillips

LOST DIVILS
WHAT HAPPENED TO THE GAME'S UNRELEASED VERSIONS?

Beyond releasing on CD-i, DOS and CD32, other versions of *Litil Divil* were worked on but never saw the light of day. Ports to the Mega Drive and Atari Jaguar CD were advertised in magazine articles at the time and Tommy is quoted as saying, "Originally *Litil Divil* was meant for the Super Famicom CD Drive, way back in 1990 or 1991, but it never materialised," in *The One*'s September 1994 issue. Our interviewees don't remember much about the Mega Drive or Super Famicom CD versions but share some insights into the Jaguar version.

Phil says Tommy and another programmer worked on a version for the Atari ST – Dom believes this may have been a later model of ST – which was running in a limited fashion at one stage. However, the hardware ultimately wasn't up to the task and the team needed to focus its limited resources towards other versions of the game. "It was the big problem, where were we going to store all the graphics," Dom recalls. "They were doing a completely separate codebase." Phil recalls talk of adapting this version across to the Atari Jaguar when it was released in 1993, an idea which ultimately never materialised. "It was probably too much effort to get it to work on Jaguar," Tommy says. "I think there probably wasn't enough interest in it. It was a new platform, so you're taking a gamble."

» [PC] This minigame is a variation of a 'shell game'; you need to correctly guess where the eyeball is after the skulls are shuffled.

» [PC] Phil is proud of *Litil Divil* for flying the flag for Ireland, saying, "The main goal for me was to make a game that was Irish-made."

» [PC] Getting blindsided by a surprise fist to the face is really funny at first: not quite so much the next dozen times, though.

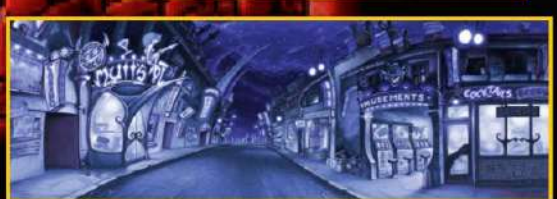
» [PC] *Litil Divil* is full of large, ghoulish faces – this one was drawn by Jerr and marks the entrance into each layer of the labyrinth.

» [PC] Leave Mutt alone for long enough and he nods off, counting sheep in his sleep.

» [PC] These rooms are the only place where you can save your progress, letting Mutt rest his head amidst the chaos.

CD-i version had an animated intro and outro, for example. "The game code was the same on all of the platforms, so it only varied at the system level or if there was something unique on those platforms," Dom says. However, long loading times were an issue for the CD-i and Amiga CD32 versions, which ran the game on CDs, and animated room transitions were added whilst the level loaded in the background, a solution Dom credits to Tommy and the art team.

After some delays, *Litil Divil* was finally released in 1993. Preproduction began on a sequel, which would have left the original's claustrophobic tunnels far behind. "Ian came out and said, 'We're gonna have this bigger interactive cartoon with *Litil Divil 2* and you're gonna wander around the streets of hell,'" Phil recalls. However, Gremlin Ireland wound down in 1996 as some, like Tommy and Dom, opted to move abroad whilst others, like Phil, joined the recently founded Funcom Dublin. All interviewees reflect fondly on their time at the short-lived studio, but Dom stresses that they existed in a vacuum since Irish game development was essentially non-existent at the time. They primarily worked from instinct and he feels that, "It's a little bit of a pioneer story in that sense." Tommy agrees, saying, "We were all young and keen, it was a great experience – you got to work on everything, if you needed something you had to figure it out and do it. There was no resources, nowhere to go to get anything. It was great in that way: it was exciting, and stressful."



» Here is some of Phil's concept art for the streets of hell in *Litil Divil 2*.

RGT

Retro Gamer Travels

LOST IN TRANSLATION

How the rest of the world experienced your favourite games

» [SNES] George Jetson uses a high-powered vacuum cleaner type thing to achieve the suction he needs.

YOKAI BUSTER: RUKA NO DAIBOKEN

JPN → JPN
Japan → Japan

FORMAT
SNES

DEVELOPER
Sting Entertainment

YEAR
1994

ORIGIN
Japan

LOCALISED FOR
Japan

REASONS
Drugs, Commercial

ECONOMY

Here's a genuine oddity – a game made in Japan for a North American audience, which had to be heavily revised for a domestic launch. Sting Entertainment originally developed this game as *The Jetsons: Invasion Of The Planet Pirates*, a licensed platformer starring everyone's favourite futuristic family. The game was released by Taito in June 1994, received a decidedly lukewarm reception from the press, and everyone moved on with their lives. Everyone except Sting Entertainment, that is.

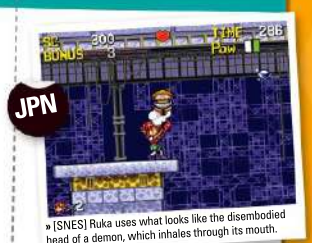
The Japanese magazine *Marukatsu Super Famicom* gained a mascot character in 1995, known as Yokai Buster Ruka – an energetic young woman who fights supernatural foes. This magazine was published by the Japanese publishing giant Kadokawa Shoten, which was also looking to break into the gaming market, and the company employed Sting Entertainment to rework *The Jetsons* into a *Yokai Buster Ruka* game. The publisher could then heavily promote its own game within its magazine, and readers would be able to enjoy Ruka's adventures on their consoles.

Of course, the retro-futuristic world of *The Jetsons* is nothing like the setting for Ruka's adventures, so some fairly heavy reworking was in order. The setting was changed to a contemporary Japanese city, and malevolent robots became malignant spirits too. Even the soundtrack was altered. The fundamental platforming remained the same though. Both George Jetson and Ruka rely on a suction device, which can be used to suck up both items and enemies, usually before spitting them back into a wall in the case of the latter. This can also be used to cling to platforms, allowing them to scale large walls.

Despite our fondness for *The Jetsons*, we'd actually recommend the Japanese version if you plan to play the game. While elements of the original layouts can be found, the stage design was significantly reworked for Ruka's adventure, making the game more intuitive and less difficult.

» [SNES] This conveyor belt section in *The Jetsons* is quite a tricky challenge for the first stage.

YOKAI BUSTER: RUKA NO DAIBOKEN
Departing: 1994



» [SNES] Ruka uses what looks like the disembodied head of a demon, which inhales through its mouth.

» [SNES] As you can see, the design of this section is much more open in the later version of the game.

MAGICAL HOPPERS

USA → JPN
USA → Japan

FORMAT
PlayStation/Saturn ■

DEVELOPER
Toys For Bob ■

YEAR
1996 ■

ORIGIN
USA ■

LOCALISED FOR
Japan ■

REASONS
Commercial ■

ECONOMY

■ **It's fair to say that Japanese players were not interested in Western games during the Nineties – while the odd hit like Crash Bandicoot broke through, Japanese players largely played Japanese games.** With that in mind, games would sometimes be reworked to give them a style more in line with the expectations of the Japanese audience, and *Magical Hoppers* was one of them. You might remember it better as *Pandemonium*, a decently well received 2.5D platformer starring Nikki and Fargus, a sorceress and a jester respectively.

In Japan, the game was renamed *Magical Hoppers* and while much of it remained the same, the plot was rewritten and the characters were redesigned. Japanese players got to follow the adventures of Guppy and Clam, with brand-new in-game models. The CGI cutscenes were replaced with new FMV sequences too – the PlayStation received voice acting over still anime images, while the Saturn version got anime scenes with proper animation. These changes were not retained for the PlayStation-only sequel, so Nikki and Fargus starred in both *Pandemonium 2* and its Japanese version *Miracle Jumpers*.

» [PlayStation] Here are Nikki and Fargus, seen in *Pandemonium* and enjoying their original CGI animated forms.

MAGICAL HOPPERS
Departing: 1996

» [PlayStation] Guppy and Clam are a lot more colourful than their Western counterparts, don't you think?

SIM CITY

JPN → FRANCE
Japan → France

FORMAT
SNES ■

DEVELOPER
Nintendo ■

YEAR
1991 ■

ORIGIN
Japan ■

LOCALISED FOR
France ■

REASONS
Cultural ■

ECONOMY

■ **When you're localising anything, it always helps to have a local involved to catch those small cultural things that might seem wholly innocuous through foreign eyes.** An American cryptocurrency company recently found this out the hard way, as a quick check on Google would probably have saved its owners from calling it Nonce Finance. Instead, Twitter piled in to let the company know that nonce is a slang term for a paedophile in the UK, with many thousands of memes mocking the decision.

Nintendo managed to avoid such a situation with its SNES version of *Sim City*. In almost every version of the game, police buildings are identified with the letters PD, referring to the city's police department. This is of course uncontroversial in places like the USA, where you'll hear about the LAPD and NYPD frequently, and even the Japanese version uses this identifier. The only exception is the French version of the game. In French, PD is short for pédéraste – again a slang term for paedophiles, and one apparently used in homophobic contexts as well. For that reason, the police buildings in the French version are marked with the shortened Pol instead.

» [SNES] Here are the original police department graphics, used even in the Japanese version of the game.

SIM CITY
Departing: 1991

» [SNES] For French audiences, this small change made the whole game that much more appropriate.

TRUE PERS

WHEN POLYGONS OVERTOOK PIXEL ART IN THE NINETIES, GAMERS GOT TO EXPERIENCE AN ERA OF NEW POSSIBILITIES, FRAUGHT WITH EXPERIMENTAL CONTROL SCHEMES AND WOBBLY TEXTURES. WE SPEAK TO VETERANS OF THE TRANSITION TO FIND OUT HOW PAINFUL IT REALLY WAS

Words by Stephen Wilds

Take a dive through the videogame media in the mid-Nineties and a theme quickly emerges: the future is 3D, and that future is now. The history of 3D technology can be traced back to 1974, first appearing in games like *Maze War* and *Spasim*, followed by the tank simulator *Battlezone*, rear cameras in racing games like *Pole Position*, and taking shape in first-person shooter games like *Wolfenstein 3D*. But a substantial wave of 3D games arrived with the fifth-generation consoles in the mid-Nineties, as the Sony PlayStation, Sega Saturn and Nintendo 64 set out to change the market. Why would anyone want to take a step back from the cutting edge?

An opinion piece on TechRadar in 2010 said, "Going back to an early Nineties 3D game now is almost painful. Flat faces, non-moving lips during conversations, stick-figure character models, smeary textures, and appalling animation… the list of problems goes on." But not every title fell victim to forced polygons and age. The visuals and controls in the legendary *Tomb Raider* haven't aged well, and *Super Mario 64*, one of the first successful 3D platformers, puts more work on players to control a flawed camera system so Mario and the environmental perils can remain visible. That didn't take away from the sensory intimacy of the game. Ed Annunziata, creator of *Ecco The Dolphin* and *Mr Bones* told us, "The world changed when I played *Super Mario 64*. Specifically, the moment where I wondered, 'Can I jump in the water?' Then I tried it and when my Mario splashed into that beautiful clear water, my brain tasted pool chlorine for a moment." Many games succeeded solely on an experience that couldn't be replicated on any other home console, and the third dimension played a big role in that.

» [PlayStation] Lorne Lanning felt that real-time 3D on Nineties consoles was crude, and opted to pre-render *Oddworld: Abe's Oddysee*.

Braving a new frontier in gaming is never easy. Andy Gavin, cofounder of Naughty Dog and lead programmer on *Crash Bandicoot*, said recently in an interview that he had to hack the PlayStation hardware to make the 3D work the way they wanted, as it almost pushed the systems too much. "The problem has always been the same," according to *PC Plus* via TechRadar, "the potential of 3D fights with the limitations of current systems, whether it's simply displaying the graphics in the first place or making them look as good as other art styles," he said. But many of those supposed early 3D 'classics' don't quite hold up in functionality or appearance, while the alternative 2D offerings retain their charm. Games like *Street Fighter III: 3rd Strike*, *Mega Man X4* and *Castlevania: Symphony Of The Night* are all still easy to play today and are continuously being ported.

While some creators abandoned the two-dimensional plane when 3D became possible, others in the industry felt there was no need to deem the old style obsolete. "Ever notice that 2D games that fake 3D often look cooler than real 3D?" Ed asked us, "That's because the 3D effect is artistically or cleverly crafted." Many creators saw the almost abandonment of the two-dimensional style as unfortunate.

Many felt that games still using the two-dimensional plane enhanced their overall presentations with more elaborate, detailed pictures, so why rush to leave that perspective behind? Game developer Soren Johnson, who worked on *Spore*, *Civilization IV* and *Dragon Age Legends*, formerly of EA, spoke in an interview originally for *Game Developer Magazine* about the genuine choice developers have between 2D and 3D, arguing that 2D games are, "An

» [Saturn] Poor 3D performance in a game could reflect badly on a console, as Sega found out to its cost.

SPECTIVE

HOW 2D GAMES TRIED TO SHINE IN A 3D WORLD

» [PlayStation] Sometimes good results could be achieved by mixing 2D and 3D, as seen in *Mortal Kombat Mythologies: Sub-Zero*.

» [PlayStation] *Crash Bandicoot*'s linear paths allowed for traditional game design while avoiding technical struggles.

THE FRANCHISES THAT PUSHED EVOLUTION

SERIES WHICH MADE THE CASE FOR NEW TECHNOLOGY BY GRACEFULLY TRANSITIONING AWAY FROM 2D

SUPER MARIO 64

■ A glorious experience that kept its 2D traits while still introducing new characteristics and being extremely enjoyable to control and play – even if the camera could be challenging. Nintendo's mascot showed what 3D stages needed to be, how to explore them and offered one of the greatest hub worlds in gaming.

METROID PRIME

■ Samus' adventures often lead her to mysterious and intriguing places, but the jump to the third dimension offered a greater way to explore environments, fight bosses, and engage with the lore. *Prime* focused on its immersion and atmosphere, pulling the combat back somewhat, and tweaking the formula where needed for innovation.

THE LEGEND OF ZELDA: OCARINA OF TIME

■ Seeing Hyrule as an open space like this wowed many. The fighting, puzzles and platforming felt new and surreal inside the various temples Link traversed, leaving many fans to call this his greatest adventure. It set a new benchmark and crammed some of the best ideas for the series all on one cart.

FINAL FANTASY VII

■ Held as a pivotal RPG experience, *FFVII* changed the series forever and floored viewers with its soundtrack, multi-disc epic, and sensational cutscenes. A strong group of characters share some of the genre's defining moments, leaving fans breathless. The game pushed the limits of performance, while pushing console sales as well.

GRAND THEFT AUTO III

■ Sometimes it's better to be up close and personal with the carnage. *GTAIII* allowed players to truly be the bane of Liberty City and rule the streets, causing mayhem for the mob or making their own fun. Its cast of characters were entertaining and as ruthless as the game was controversial.

THOSE WHO FAILED TO ADAPT

WHETHER THEY WERE EARLY STUMBLES OR FATAL MISTAKES, THESE 3D EFFORTS FAILED TO LIVE UP TO THEIR 16-BIT COUNTERPARTS

BUBSY 3D

■ Some call it a terrifying example of early 3D, a sluggish and janky experience, or a fever dream featuring one of the most annoying mascots in the industry. Past its poorly designed levels, poor humour and buggy programming, the game is presented poorly, attempting to hide that with bright colours.

EARTHWORM JIM 3D

■ This fun-loving franchise loses a lot of its character, only to become boring and tedious. A long and troubled development gave birth to slippery controls, a bad camera, uninteresting boss fights and dull levels. It was so poorly received on the N64 that the PlayStation version was cancelled.

PRINCE OF PERSIA 3D

■ The Prince's first 3D adventure lacked variety in its sluggish gameplay, leaving combat and platforming overly difficult in parts. It offered ample glitches and pitted players against poor AI. The creator wanted nothing to do with making another one, until things fell into place for *Sands Of Time*, redeeming the series.

MORTAL KOMBAT 4

■ The console port was littered with bugs, failed to expand the mechanics past weapons and poor strafing, and had the worst kombat in the series. *MK4* introduced a different villain and subpar new fighters, while boasting some of the weakest finishers and most agonising story endings in the franchise's history.

FIFA 96/97

■ The expanded environment made running the pitch and passing annoying, especially with some wonky ball physics. Gameplay felt slower to most, granting a bit of realism, while also making the action boring. Add the lackluster commentary as well as insufficient AI and fans will run back to versions on previous consoles.

» [Saturn] *Virtua Fighter 2* inverted the *Mortal Kombat Mythologies* approach, using 3D characters and rings against 2D backgrounds.

» [N64] Some genres such as real-time strategy stayed largely 2D to begin with, for practical reasons like the need to move many objects simultaneously.

underrated style that is often unfairly ignored as an old technology." Developers ultimately believe that games with excellent 2D graphics age more gracefully.

Josh Tsui, a game designer and artist, formerly of Midway and EA, believes many 2D games made in the early 3D era held their weight. "3D was too young at the time and a lot of those games look terrible now while the 2D stuff looks better," he tells us. "It's a bit unfair to compare though as you're comparing late-stage 2D against early stage 3D." Technology's strengths and limitations played a big role in a game's presentation. "Look at *Wrestlemania* [the arcade game], those are still some of the best sprite work of any game out there, even to this day," Josh says. 3D lent itself better to backgrounds, while character models were more of a challenge. "The artwork was crafted specifically for those machines and we were able to make them sing." This didn't mean that every game left in the former dimension looked better. "I think having fantastic art direction on 2D games really stood them out," Josh continues. "Look at the first three *Mortal Kombat* games. The artwork is still amazing and rich. This was due to the amazing art direction."

So why leave behind refined hardware to risk the untested waters? For Josh, with the passage of time, these transitions are always an inevitability, "It was just the natural evolution of the technology. By the time the Nineties came around 2D basically had the ceiling." Ed agrees. "Everyone felt the same way, 3D was the future." Like many in the profession, Jenna Fearon, an artist and game developer, saw the

» [PlayStation] Tiburon took on *Madden* during Jenna Fearon's time there, as another developer had struggled to move the series into 3D.

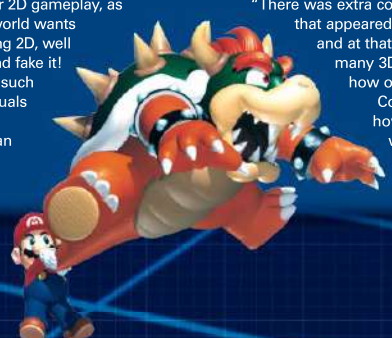
» [N64] Chris Sutherland would ultimately get to move from pre-rendered 3D to masterful real-time 3D with *Banjo-Kazooie*.

» [SNES] *Donkey Kong Country* wasn't a real-time 3D game, but the results impressed players regardless.

vast opportunity, "For us at Tiburon we were all totally wowed by what could now be done." But it wasn't just developers that were awed by the possibilities, as Chris Sutherland, the head programmer on *Donkey Kong Country* who still makes 2D games like the recent *Yooka-Laylee And The Impossible Lair*, remembers. "Fifth generation consoles such as the PlayStation and N64 allowed games to display visuals that the mass market of console owners had never experienced; both that and the accompanying platform marketing made it clear that 3D games were the 'new cool thing.'"

Prioritising technological innovation, over a game's potential for longevity, as many developers at the time did, doesn't always serve the game's artistry. Greg Sewart, alumni of *Electronic Gaming Monthly*, tells us, "There are plenty of developer interviews where folks who were in the industry back then lament the switch. Especially from a visual standpoint. Since 3D games on the PlayStation/Saturn/N64 really didn't look very good even at the time, where the late games on the SNES/Genesis could be absolutely gorgeous looking."

One late SNES game that bridged the gap was *Donkey Kong Country*, which was able to ride the trend for 3D visuals despite being on a console primarily designed for 2D gameplay, as Chris recalls. "If the world wants 3D and you are making 2D, well you can always try and fake it! There are techniques such as layering the 2D visuals to give a 3D parallax effect and also one can pre-render the 2D animation frames, both for extra detail and smoothness. Even today, games like *Clash Of Clans* do this on mobile." Attendees of the 1994 Consumer Electronics Show were sufficiently impressed by the game's pre-rendered 3D graphics that they believed it was for the successor to the SNES, and they were of a considerably higher quality than the real-time 3D on the new consoles. "Tim Stamper [of Rare] said that he wanted [*Donkey Kong Country*] to be a game people would still be impressed with when played in many years to come, and he was correct," Chris remembers.

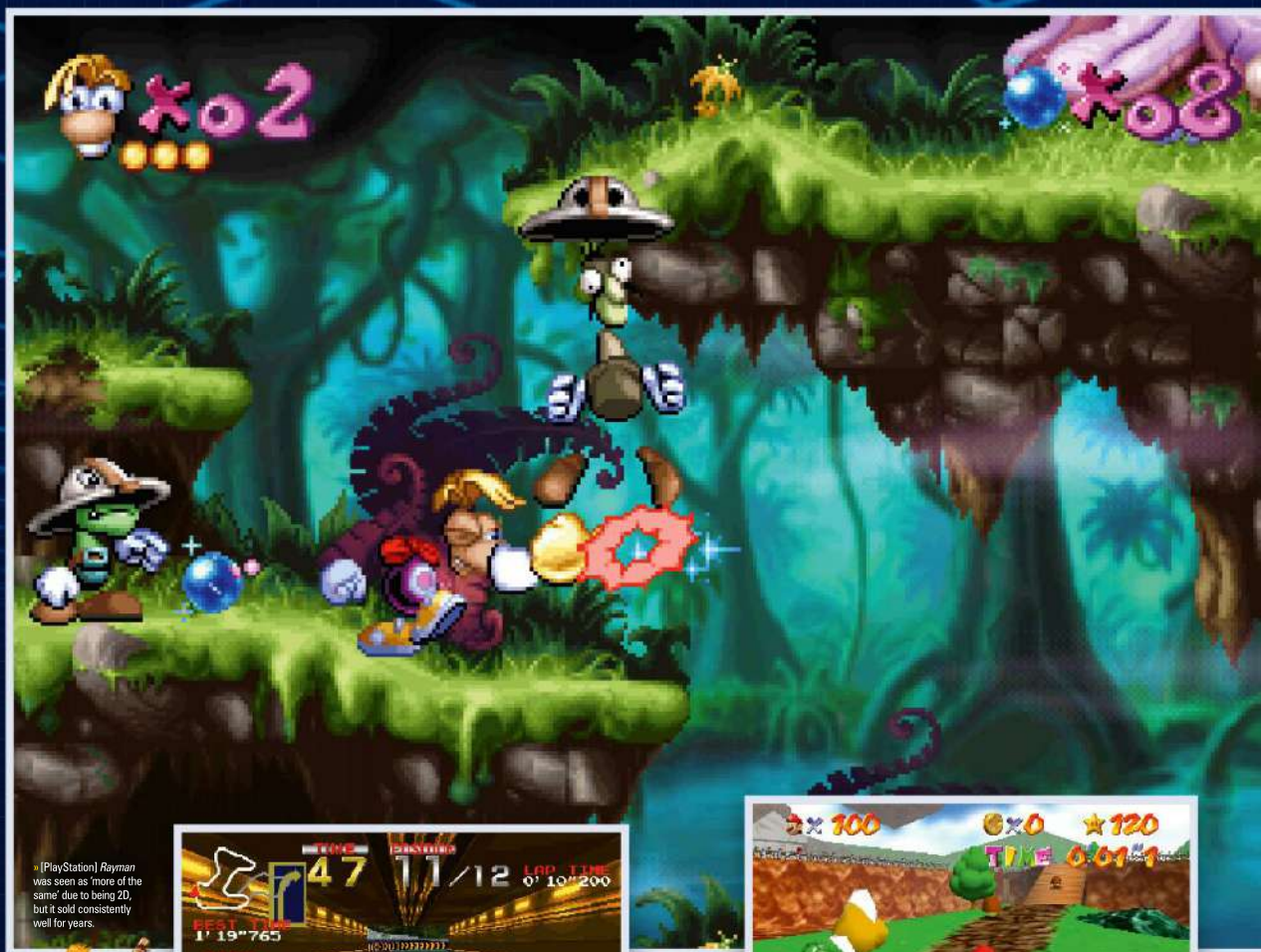


For Ed, frustrations with the new machines included how inefficient they were at representing 3D imagery. "Like the Saturn," he admits, "I think every single 3D game on that platform looks like crap, including mine." His displeasure even extended to his character, Mr Bones. "I wish Mr Bones was pre-rendered. We wanted him to be 3D and driven by motion capture so bad we ended up making him look terrible. The motion is ahead of its time in my opinion, but his parts are so aliased we should have called him Mr Static." According to Chris, creators faced many difficulties making these new larger games.

"There was extra complexity and problems that appeared when creating 3D games, and at that time there weren't that many 3D titles to be able to see how others tackled it."

Companies had to consider how developers would work with this new and issue-riddled hardware to create games as well. "There was, of course, a whole slew of know-it-all people who felt that devs that made 2D games couldn't make the transition to 3D," Ed continues. "I remember the phrase, 'They don't know 3D,' as if it's inaccessible knowledge only the very few could obtain." Many could learn, but Chris remarked that some in the industry just didn't have the skill sets to evolve to a new way of doing things. "Moving from 2D to 3D is quite a leap for artists and engineers, in some cases, it involves hiring new staff with the appropriate skills so these changes can take time." Greg also confirms this, "They were relearning almost everything from scratch." Many were up for the new challenge, excited by its newness, and these programmers and engineers would thrive best with 3D, "Since almost all of the long-established game development and user experience rules didn't really apply anymore," Greg continues. Games couldn't stay in development forever, but this new education took time and trial and error.

Of course, not every company was led by the technology of the home market, and Midway's own technological investments ultimately dictated the pace at which it embraced 3D. "The main decision for most of these games was that (except for *Mortal Kombat Mythologies*) they were arcade games. Arcade machines from Midway at the time were 2D systems. So we really pushed the boundaries of the hardware," Josh explains. But 3D games were also taking over the arcades and the success of the consoles was impossible to ignore, so the switch was inevitable. Even so, Midway's first steps were tentative. "*Mortal Kombat Mythologies* was different, that was a combination of 2D and 3D and really acted as a



» [PlayStation] *Rayman* was seen as 'more of the same' due to being 2D, but it sold consistently well for years.

» [PlayStation] Textured polygons were novel in arcades in 1993, so it's understandable that they'd be impressive in the home in 1994.

» [N64] With the ability to simply run around enemies, 3D technology necessitated a total rethink of how *Mario* games should play.

» [N64] Despite initial excitement over *Castlevania*'s 3D debut on the N64, the games couldn't match the 2D entries.

» [Arcade] Advances in 2D were ignored, with *Dreamcast Magazine* claiming "no discernible graphical [...] difference between this and the SNES version."

bridge for Midway to transition their games to the new tech," he recalls. "The characters were all in 2D because 3D characters were terrible at the time. But 3D was great for environments so we wanted to play to each tech's strengths. The game is so-so but I feel like we really pulled that combo off (pun intended!)."

The new push to 3D drove some to see the old style as 'unfashionable'. "The platform holders needed to drive sales of their new consoles and one way they could do this was to focus on game titles that clearly could not have been created on previous systems," Chris mentions, offering insight from higher-ups. "There was a feeling that 2D was like silent movies in the age of unsilent films," Ed bluntly tells us. "It felt like when you pitched the idea for funding, you really, really, wanted to say this game is 'Three Deeeee!'" This wasn't just on the industry side, however. "I think the anti-2D stance, for the most part, was at a publisher level," Greg says. "There were players who had strong preferences either way, but the focus on 3D games really had more to do with decisions made by those who were footing the development bills and taking on the financial risk." One in particular stood out to him. "Sony had a pretty open, anti-2D stance, and considering the PlayStation basically took over the world, pickings were pretty slim for a while there."

That isn't to say everyone felt that 2D was being pushed out, or that they agreed with these unflattering sentiments. "Not so much unfashionable, just business," says Jenna, "The industry was going 3D and we followed. There were still 2D games being made, but 3D was the new wave." However, she admits it affected the team as a whole. "A few of us artists were still interested in doing some 2D games (I was one of them) and John Schappert, our boss, let us spend some time developing ideas, but ultimately the industry (and particularly EA) was interested in moving into 3D." Even if some developers wanted to still play in the old world, larger company mandates prevented that. "Developing a game was a larger financial risk in the late-Nineties than it had been even three years earlier," Greg explains. "Plus I think a lot of folks lost a lot of money on the whole FMV games push a few years earlier, so the safe bet was probably the way to go."

» [PlayStation] Texture warping was a common visual error on the PlayStation and Saturn, leading to 'wobbly walls' in games.

» [Arcade] For a time, 2D graphics technologies such as digitised sprites offered a higher visual quality than real-time 3D.

Nostalgia factored into some fans pushing the move into the three-dimensional gaming realm. "The excitement of classic franchises entering the third dimension got a lot of people wearing rose-coloured glasses at the time," Greg mentions. "*Castlevania 64* being a great example. That game was always pretty clunky, but still got very good reviews back in the day." The desire to see beloved characters rebooted with new, more elaborate adventures left little room for anything that didn't scream 'new technology', even for 2D games that still utilised some advancements. "I think a lot of people didn't really know the difference between 2D and 3D since it was all just flat graphics on a TV screen," says Jenna.

Whether consumers knew how the tech worked or just wanted what was 'cool', the affinity for 3D games has shifted, over time. "People are starting to look back at some of these games and revisit how good they were," Josh explains. "Some games were just better in 2D and made sense to stay that way. A lot of games went 3D for no reason other than to try something new without realising how gameplay can sometimes get compromised."

Creators who stayed with what they knew did so not because they couldn't make the transition, but because they felt 2D worked better. "One of the first interviews I ever did with a developer," Greg recalls, "was Lorne Lanning and Sherry McKenna talking about their first game, [*Oddworld:*] *Abe's Oddysee*. They were a company that cared more about its artistic vision than the latest tech, and so they made the choice to stick to 2D rather than compromise the visual fidelity of their world and characters." Greg also points out it was sometimes exciting to see a new 2D game because they were few and far between and, "There was never any danger of a 3D games shortage."

Many interviewed here believed it wasn't necessarily easier to make a 3D game over something in 2D or vice versa. "Easier simply comes from the amount of effort you decided to put in a game," Ed says. "All games are easy to make if you don't want to spend a lot of time on it." The early 3D era pushed the industry forward, but for Josh and others, looking back at games that took advantage of the hard work in 2D that preceded them was like 'watching paintings come to life' in an otherwise blocky and triangle-filled polygonal world.

WHAT 3D CHANGED IN THE INDUSTRY

THE INTRODUCTION OF 3D GAMES HAD A HUGE IMPACT ON THE GAMES INDUSTRY. HERE ARE JUST A FEW ADJUSTMENTS THAT HAD TO BE MADE

CUTTING-EDGE PROBLEMS

Though 3D looked like the future, many developers weren't familiar with the new technologies and ran into frustrating problems, lacking the experience to overcome them quickly. Many of these fixes caused other errors and often had to trick the system to work. Many games were visually hindered and aged poorly.

BIGGER AND MORE EXPENSIVE

In most cases, 3D games require larger staff numbers, longer development times and bigger budgets. As game worlds opened up, the ability to keep projects small decreased. CD-based games took on FMVs, extensive soundtracks and larger voice casts, all of which demanded more work, time and money, making games a greater risk.

WHERE 2D WAS FORCED TO RETREAT

Many 2D games and concepts that couldn't find homes on home consoles rushing to the new trend wound up on handhelds. Nintendo's Game Boy Advance became a haven for creative 2D adventures and kept some classic series alive in their original forms, while showing off what the technology could do.

PUBLISHERS IGNORING 2D GAMES

Many publishers deemed 2D games obsolete, not only attempting to ride the new wave, but not look weak by showing the old medium any favours. Companies like Sony wanted all of its games in 3D, only granting tested studios or proven franchises the occasional freedom to break this rule.

FORCING THE FRANCHISE

Many classic IPs felt the pressure from publishers to have a 3D entry as soon as possible. Some of these characters saw a smooth transition, but many were too concerned with being in the moment rather than having good gameplay and longevity. This is reflected in some reviews from that time.

Neo Geo CD Controller

» **PLATFORM:** Neo Geo » **RELEASED:** 1994
» **COST:** ¥1,440 (launch), £70+ (today, boxed) £50+ (today, unboxed)

With affordable software and a console that could be considered reasonably priced – though admittedly, at the high end of reasonable – the Neo Geo CD was SNK's big play towards having its powerful 2D hardware embraced by a mainstream audience. With that aim in mind, the company examined every way to make its hardware more appealing, and decided to replace the Neo Geo's standard joystick controllers. The result was the Neo Geo CD Controller, a game pad offering four main buttons and directional controls just like the joysticks, but in a manner more suited to the home. These were undoubtedly cheaper to manufacture too, which would have been a nice bonus for SNK.

The distinguishing feature of the Neo Geo CD Controller is its use of a digital thumbstick, rather than the more traditional d-pad. While it feels unusual at first, this is an excellent design choice that makes circular motions incredibly easy to perform – which is fantastic for the console's many fighting games. The Neo Geo CD Controller design would go on to be reused for a PS2 controller as well as the Neo Geo Mini's official pads, and its thumbstick inspired the smaller version on the Neo Geo Pocket consoles. ✱

ESSENTIAL GAME
Windjammers

While we mentioned that fighting games benefit from the Neo Geo CD Controller's excellent thumbstick, this alternative sports game also feels great on the controller. This is because the game requires you to make quarter-circle motions frequently, in order to throw curving shots that will hopefully bamboozle your opponent – the super shots are particularly effective in that regard. It doesn't hurt that the game is one of our favourite Neo Geo games anyway, and the fact that the CD version is quick to load makes it an ideal game for anyone who isn't quite loaded enough to pay cartridge prices.

Neo Geo CD Controller fact

■ Since the Neo Geo home consoles all use the same controller port, it's possible to use the Neo Geo CD Controller on a Neo Geo AES console, or the original Neo Geo joystick on a Neo Geo CD.

SUPPLIED BY
EVAN AMOS

SO YOU WANT TO COLLECT...

NEO GEO POCKET COLOR

Only 82 games were ever released during the Neo Geo Pocket Color's short lifespan, but what games they were! A small selection of world-class fighting games, arcade gems, puzzlers, RPGs and odd curiosities make SNK's portable a highly collectible system

Words by Ashley Day

EVIL RYU, I CHOOSE YOU!

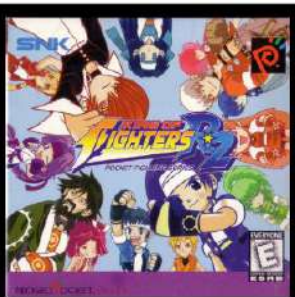
SNK VS CAPCOM: CARD FIGHTERS CLASH

DEVELOPER:	SNK
RELEASE:	1999

■ Arguably the best game on Neo Geo Pocket Color, *Card Fighters Clash* is a card battling RPG that takes more than a little inspiration from *Pokémon*. Building a personalised deck of popular characters from both SNK and Capcom games is a huge part of the appeal, but it's the surprisingly tactical card game itself that will keep you playing for hours.

Since each character's BP represents both their attack power and health, choosing when to attack or defend can be a nerve-wracking decision, and it's not unusual for tense battles to go right down to the wire. Like *Pokémon*, two different editions of the game were released: an SNK version in a blue box and a Capcom version in yellow, each featuring a unique starting deck and exclusive cards. It's worth noting that the SNK cart generally sells for about £10 less than the Capcom one. The sequel, *SNK Vs Capcom: Card Fighters 2 Expand Edition* added 240 new character cards and was the final release for the Neo Geo Pocket in 2001, but was unfortunately never released in English.

» [Pocket Color] *Card Fighters* got a second sequel on Nintendo DS in 2006 but it sadly lacked the same magic.



DREAM MATCH

Is the Dreamcast/NGPC link cable worth it?

Two years before Nintendo coined the term 'connectivity' with the GBA/GameCube link cable, SNK got there first and even linked up to a rival company's console. How cool is that! The cable worked with five NGPC titles – the three *SNK Vs Capcom* games, *Cool Cool Jam* and *King Of Fighters R-2* – and could be used to unlock content in Dreamcast games like *King Of Fighters '99* or *Capcom Vs SNK 2*. The cable goes for upwards of £50 these days, but since it mostly unlocks trivial things like art galleries, it's perhaps best left to the hardcore SNK fans.

MECHS APPEAL

FASELEI!

DEVELOPER:	SACNOTH
RELEASE:	1999

■ Released just as SNK was going bust, *Faselei!* barely made it to the shelves, with only a small number of copies produced in the West. But those who were lucky enough to play this tactical mech RPG discovered a cracking game, sending the asking price soaring as scarcity and desirability collided.

In *Faselei!*'s tactical battles, you input a series of commands for your mech by tapping simple visual icons, a bit like programming a heavily armoured Big Trak. So if you don't mind missing the story, the Japanese version is perfectly playable and a hell of a lot more affordable. Alternatively, there's always the US version, which never officially made it off the production line but can be found in loose cartridge form for under £100 if you keep your eyes peeled.

» [Pocket Color] *Faselei!* is easily one of the best games on the system and more than justifies its reputation.

HEDGE FUND

SONIC THE HEDGEHOG POCKET ADVENTURE

DEVELOPER:	SNK
RELEASE:	1999

■ Over a year before Sega announced the discontinuation of the Dreamcast and its move to third-party publishing, to see a *Sonic* game on a console without a Sega badge on the bonnet still felt like a novelty. SNK played it safe with this one, hewing so close to the template of *Sonic 2* that it almost feels like a remake, even though the stage layouts are completely fresh. It even includes a decent rendition of the iconic half-pipe bonus stage. What it lacks in originality, *Sonic Pocket Adventure* more than makes up for in sheer joyful playability. It's as fast as you like and the colours beam brightly from the Neo Geo Pocket's modest screen. It is exactly what it says on the box: an authentic portable rendition of *Sonic The Hedgehog*, and it's not too pricey either.

» [Pocket Color] This wasn't the first *Sonic* game to release on a non-Sega system. But the less said about *Sonic Jam* on the Tiger Game.com the better.

FINAL FIGHT

SNK VS CAPCOM: THE MATCH OF THE MILLENNIUM

DEVELOPER:	SNK
RELEASE:	1999

■ SNK practically built the Neo Geo Pocket around fighting games. The portable's clicky little thumbstick was perfect for pulling off special moves, while the complex gameplay and animations of the arcades shrunk down brilliantly to the small screen thanks to their dinky sprite work and simple colour palettes. This template was used to superb effect across all of SNK's major fighting game brands, and every single one of them is an essential Pocket purchase. But right at the top of the pile is *SNK Vs Capcom*.

Made by a developer at the height of its power, it crammed tons of characters, beautiful backgrounds and great moments of fan service into the cart, and even found room for some minigames based on other SNK and Capcom titles too. It plays brilliantly, it looks ace, and if you have a Neo Geo Pocket then consider it a must.

» [Pocket Color] SNK also created an *SNK Vs Capcom* for Neo Geo AES but it's a completely different game and not as fun as the Pocket release.

GAME & MATCH

We look at Match Of The Millennium's minigames

Target 9

A target practice game based on *Metal Slug 3*, where you shoot down UFOs from one of nine on-screen squares. Make sure to time your reloads for the brief moments when there are fewer enemies around.

Blade Arts

Based on *Samurai Shodown*, you control Haohmaru and must slash in four different directions to cut through straw training dolls as they appear. There's a nice Game & Watch score attack quality to this one.

Ghost Trick

Ironically sharing a name with a Capcom game that would release years later, this features Arthur from *Ghosts 'N Goblins*, leaping across gaps to collect treasure. Don't get caught by Red Arremer or you'll crumple to bones.

Cat Walk

A *Dancing Stage*-style rhythm game where *Darkstalkers*' Felicia dances to the signature tunes of six different characters. Chun-Li's theme requires some nimble finger work!

COLLECTING TIPS!

Switch regions, save money
Prices vary by region, and no one country is generally cheaper than another, so mix regions. Loose carts will also be typically cheaper than the prices featured here.

Clam up!
Be aware that some games came in cardboard boxes in the US and Japan, whereas Europe always got the much nicer, hard clamshell cases that'll last a lifetime.

Screen saver
If you're serious about playing on original hardware then you may want to mod your NGPC with a backlit IPS screen, so you can play anywhere, anytime.

The colours!
There are several different colour variations of the Neo Geo Pocket, a valuable Hanshin Tigers design and a very nice slim model. Have fun choosing the one for you.

RUN-AND-FUN

METAL SLUG 2ND MISSION

DEVELOPER: UKIYOTEI
RELEASE: 2000

EXPECT TO PAY £140+ EUROPE

First up, you really should get both NGPC *Metal Slug* games. Each is a fantastic miniaturisation of the stellar run-and-gun series and completely captures not just the look but also the feel of the originals. But if you only pick one, then *2nd Mission* is the way to go. It's simply bigger and better, and that little bit closer to the quality of the arcade games. It's remarkable how much is crammed in there: two playable characters, each with their own weapons, plus a third unlockable character; three different vehicles to jump into; and a whopping 38 missions, more than double that of the first game. If your collection doesn't include *Metal Slug*, then you're not yet done.

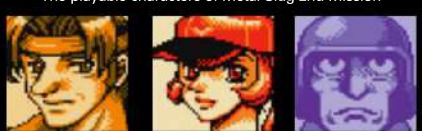
EXPECT TO PAY £75+ USA

» [Pocket Color] As well as the graphical improvements, *Metal Slug 2nd Mission* also features full speech effects to top off the arcade feel.

EXPECT TO PAY £75+ JAPAN

THE METAL BAND

The playable characters of Metal Slug 2nd Mission



Gimlet
Looks quite a bit like Tarma and is incorrectly named Marco in the US manual. He specialises in the shotgun, grenade gun and 'rocket lawn-chair'.

Red Eye
Favours the fire gun, bazooka and missile pod, and actually does have red eyes. Like Gimlet, Red Eye follows her own unique route through the missions.

Tequila
Unlocked by beating all 38 missions, Tequila is an undercover agent disguised as an enemy soldier. He can use any weapon and play any mission.

PAINT THE TOWN...

CRUSH ROLLER

EXPECT TO PAY £150+ USA

DEVELOPER: ADK
RELEASE: 1999

This obscure maze game was originally released in arcades in 1981, but the NGPC version is a full remake with much nicer graphics, animations and music. It's obviously influenced by *Pac-Man*, but rather than collect dots in a maze, you have to paint the floor by rolling over the roads while avoiding the baddies. Occasionally an Irkster will break loose and roam all over the wet paint, leaving adorable but annoying footprints that you'll need to paint over again. There's just something inherently satisfying about painting a stage to completion, and the game does a good job of keeping you interested with new levels that vary both the maze design and the visual themes. By the way, if you have *Pac-Man* on NGPC then you also have the included CrossRing, which modifies the 8-way thumbstick to work in just four directions, and it works great with *Crush Roller*.

EXPECT TO PAY £85+ JAPAN

» [Pocket Color] *Crush Roller*'s vibrant colours really stand out on the NGPC screen and make it a joy to behold.

EXPECT TO PAY £40+ EUROPE

THE GOOD WITCH

FANTASTIC NIGHT DREAMS: COTTON

DEVELOPER: TAITO
RELEASE: 1997

EXPECT TO PAY £600+ EUROPE

Whatever you do… do not, in the year 2000, buy the Neo Geo Pocket version of *Cotton* for £30 and then sell it a few months later for £20. Trust this correspondent, that's something you'll be kicking yourself over for years to come! Anyway… the big question surrounding this infamously expensive version of *Cotton* is, of course, is it worth all that money? If you're paying these eye-watering prices then it's probably more to complete your collection than it is to play the game. But this is actually a very nicely done and highly playable portable version of the 1991 arcade game, and is, surprisingly, the only shmup that was released for the system. There are plenty of other ways to enjoy *Cotton* – like the Nintendo Switch port of the X68000 version or on Sega's Astro City Mini – so you're probably only going to want this one if you're absolutely nuts about the Neo Geo Pocket.

» [Pocket Color] It's a shame *Cotton* is so pricey now. It's a great little portable shmup.

EXPECT TO PAY £600+ JAPAN

MORE GAMES TO CONSIDER

SNK GALS FIGHTERS

DEVELOPER: YUMEKOBO
RELEASED: 2000
EXPECT TO PAY
EUROPE **£300+**, US **£235+**, JPN **£100+**

BASEBALL STARS COLOR

DEVELOPER: SAURUS
RELEASED: 1999
EXPECT TO PAY
EUROPE: **£45+**, US: **£45+**, JPN: **£25+**

ROCKMAN BATTLE & FIGHTERS

DEVELOPER: CAPCOM
RELEASED: 2000
EXPECT TO PAY
JPN **£130+**

COOL BOARDERS POCKET

DEVELOPER: UEP SYSTEMS
RELEASED: 2000
EXPECT TO PAY
EUROPE **£290+**, JPN **£70+**

KING OF FIGHTERS R-2

DEVELOPER: SNK
RELEASED: 1999
EXPECT TO PAY
EUROPE **£15+**, US **£50+**, JPN **£35+**

BLOCK CHAIN

PUZZLE LINK 2

EXPECT TO PAY £200+ USA

EXPECT TO PAY £150+ EUROPE

DEVELOPER:	YUMEKOBO
RELEASE:	1999

» [Pocket Color] Be careful searching for *Puzzle Link 2* on auction sites. Some sellers erroneously list the colour remake of the original monochrome game under this title.

■ Neo Geo Pocket has its fair share of puzzle games and you can buy any one of them in the confidence you're in for a good time. *Puzzle Bobble Mini*, *Puyo Pop* and *Magical Drop Pocket* are all excellent miniature versions of classic puzzlers, but if you want an arcade-style puzzle game that's exclusive to Neo Geo Pocket then look no further than *Puzzle Link 2*. If you've ever played *Magical Drop* or *Money Puzzle Exchanger* (anyone?) then the playfield, with its steadily descending stacks of icons, will be instantly familiar. The key USP is your ability to draw a line that can link the icons together to make them disappear and trigger combos; a satisfying gimmick that makes *Puzzle Link 2* exactly the zen-like, relax-'em-up you want from a handheld.

MINIGAME MANIA

GANBARE NEO POKE-KUN

EXPECT TO PAY £80+ JAPAN

DEVELOPER:	SNK
RELEASE:	2000

■ SNK's portable is best known for its arcade adaptations, but it also has its fair share of genre-swerving oddities, like the near indescribable *Ganbare Neo Poke-Kun*. This unique game most resembles a virtual pet and is light on interaction. You can't directly control the quirky fella but you can hold some influence over his world by fiddling with parts of his tiny apartment and opening the door to let in some odd visitors. It's not clear why, but Poke-Kun will eventually start to develop his own videogames, which he'll then allow you to play. These are initially very simple but as his dev talents grow he'll create more complex experiences like shoot-'em-ups or fighting games. All of which is great fun, but it's really the act of observing Poke-Kun's weird little world that makes this game so memorable.

» [Pocket Color] Poke-Kun became a sort of mascot for the NGPC and was used in marketing materials during the system's final months.

FORE! PLAY

NEO TURF MASTERS

EXPECT TO PAY £50+ USA

EXPECT TO PAY £30+ EUROPE

DEVELOPER:	SAURUS
RELEASE:	1996

■ If you've ever played the big boy Neo Geo version of *Neo Turf Masters* then you know that it's one of the greatest arcade golf games ever made, striking a perfect balance between challenge and accessibility. The secret of its success is how relaxing it felt to play; it didn't matter if you won or lost, because when you played *Neo Turf Masters* time somehow stood still.

» [Pocket Color] Despite its simplicity, *Neo Turf Masters* features some imaginative course designs that might surprise you.

The pocket version is everything you love about the original, distilled down into adorable chibi form and loaded with extra charm. Even if you don't usually play sports games, this is so perfect for the portable that it just has to be a part of your collection. Curl up with the Neo Geo Pocket, take on a few holes, and let your worries slip away.

EXPECT TO PAY £50+ JAPAN

PLAY BALL!

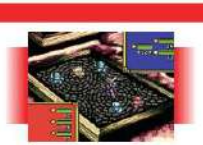
More sports games on NGPC

Pocket Tennis Color

A delightfully simple arcade tennis game that falls somewhere between Namco's *Smash Court* and Camelot's *Mario Tennis*. Its standout feature is the selection of five different courts including a desert canyon, jungle and even the inside of a traditional Japanese living room. No simple grass or clay here.

Neo Geo Cup '98 Plus Color

You might think the NGPC would use tiny sprites to fit an entire football team on its screen but SNK leant into its arcade roots with huge sprites, expressive animations and even a few speech effects to maximise the fun, even if you're not a soccer fan.



OGRE BATTLE GAIDEN: PRINCE OF ZENOBIA

DEVELOPER:	SNK
RELEASED:	2000

EXPECT TO PAY

JPN **£35+**

DIVE ALERT

DEVELOPER:	SACNOTH
RELEASED:	1999

EXPECT TO PAY

EUROPE **£150+**, US **£65+**, JPN **£45+**

THE LAST BLADE

DEVELOPER:	SAURUS
RELEASED:	2000

EXPECT TO PAY

EUROPE **£190+**, US **£70+** (Loose), JPN **£55+**

EVOLUTION: ETERNAL DUNGEONS

DEVELOPER:	STING/ESP
RELEASED:	2000

EXPECT TO PAY

EUROPE: **£500+**, JPN: **£30+**

BIOMOTOR UNITRON

DEVELOPER:	YUMEKOBO
RELEASED:	1999

EXPECT TO PAY

EUROPE **£40+**, US **£100+**, JPN **£45+**

Dungeons & Dragons Collection

NOSTALGIA AND LOADINGS

» Saturn » 1999 » Capcom

The other week I started streaming on Twitch (you can find me under my RetroGamer_Daz handle). One of the first games I started playing was *Tower Of Doom*, the first of Capcom's side-scrolling fighters set in the *Dungeons & Dragons* universe. While I didn't have time to complete it, I was reminded of what a great game it was and after the stream ended I decided to play it on my Saturn.

Some will see this choice as bizarre, as the version by Iron Galaxy Studios (which I was playing) is superb, not just because of how accurate both games are, but also due to the huge number of neat extras that the team added to each title. And yet, here I was powering up the Saturn version instead. Was I mad? No, I was simply nostalgic.

Capcom was a solid supporter of Sega's console during its lifetime, releasing a number of fantastic arcade conversions that often felt indistinguishable to the real thing. Needless to say, when I picked up my This Is Cool Saturn and the 28 shmups that came with it, I also started grabbing numerous other imports, and Capcom's side-scrolling brawler was one of the first I grabbed.

Playing like a steroid-injected version of *Golden Axe*, the Saturn version (which also includes the superior *Shadow Over Mystara*) may have suffered from some lengthy loading times and the animation wasn't quite as impressive as the arcade original, but it still left an impression on me and I completed it countless times. Yes the first game can be fiddly to play due to the large amounts of Japanese (I've lost count of the times I've used a weapon by accident) and yes those frequent load times do become annoying, but there's no denying that its action is fantastic and the monster design is absolutely terrific and incredibly authentic to boot.

I could have continued with the PC version but there was something rather quaint about waiting for your fairy guide to appear whenever you hit a loading pocket, or listening to the whir of the Saturn's drive when you hit a new level. Hell, I was having such a fun time with it, I may hassle Nick and see if he'll get my Saturn up and running for my next stream.

ghost hunter

THE MAKING OF

IN THE KNOW

- **PUBLISHER:** SONY COMPUTER ENTERTAINMENT
- **DEVELOPER:** SCE CAMBRIDGE
- **RELEASED:** 2003
- **PLATFORM:** PLAYSTATION 2
- **GENRE:** THIRD-PERSON SHOOTER

DEVELOPER HIGHLIGHTS

MEDIEVIL
SYSTEM: PLAYSTATION
YEAR: 1998

MEDIEVIL 2
SYSTEM: PLAYSTATION
YEAR: 2000

24: THE GAME (PICTURED)
SYSTEM: PLAYSTATION 2
YEAR: 2006

WHEN THERE'S SOMETHING STRANGE, IN THE NEIGHBOURHOOD, WHO YA GONNA CALL? IF IT WAS THE EARLY NOUGHTIES, YOU'D HAVE SIDED WITH TEAM PLAYSTATION IN THE CONSOLE WARS, AND YOU HAD A HANKERING FOR SOME THIRD-PERSON SPOOK SHOOTING, THE ANSWER WAS – GHOSTHUNTER!

WORDS BY JAMES DYSON

***Ghosthunter* was a horror-themed action adventure game developed by SCE Cambridge, makers of the cult *MediEvil* series.** Released in 2003 exclusively for the PlayStation 2, players assumed the role of Lazarus Jones, a rookie detective of the Boston PD turned spook exterminator. Called out to investigate strange goings on at an abandoned high school, the premise saw Jones accidentally unleashing a horde of assorted ghosts, ghoulies and long-legged beasties from a mysterious machine housed in the school's basement. With the help of the machine's sentient AI program, players were tasked with undoing the mess Jones had made and stopping a sinister plot along the way.

Ghosthunter's core gameplay was a mix of combat and puzzle solving. Jones controlled in third-person, with players able to switch between standard traversal and a zoomed-in targeting mode that slowed movement. The player could also go into a fully first-person mode, although they couldn't move in this perspective. Early on in the game, Jones' spirit is fused with a benevolent mute spectre called Astral. As well as allowing him to see ghosts, Astral also provided the game's main puzzle sections. At certain specific points players could call on her to leave Jones' body and explore the environment through her eyes. Astral could reach places Jones couldn't, and was able to interact with objects to open up new paths. Astral would also unlock a number of abilities as the game advanced, giving the players more tools with which to solve the game's puzzles.

Combat was a fairly straightforward affair, barring a few twists. Being dead already, Jones can't kill his foes, only contain them. The player had access to a number of weapons with which to deal with these apparitions, from conventional firearms like a pistol and a shotgun, to special ghost guns that used ectoplasmic energy dropped from enemies for ammo. The standout in the arsenal was the game's Capture Grenade. Thematically, the weapon echoed the proton packs from a certain popular Eighties movie, though mechanically it functioned much like the Pokéballs from *Pokémon*. The player would first have to weaken enemies using their standard weapons; when a ghost's defences were lowered sufficiently, they could throw the Capture Grenade frisbee-style at the spirit, trapping it within in a burst of impressive-looking VFX. Although the device would automatically boomerang back into his hands, Jones only had access to a single Capture Grenade at any one point. As a result, facing off against multiple enemies could often become a tense game of plate-juggling, with players needing to whittle down one enemy's resistance whilst trying not to get blindsided by its companions.

Both the environments and the enemies in the game displayed a wide degree of variety and creativity. Over the course of their journey, players would explore backwater bayous, a nightmare-logic gothic mansion, a WWII-era ghost ship, a prison and an abandoned top-secret military base, all classically spooky locales.

> "The swamp level is influenced by every Deliverance-style redneck movie you've ever seen"
> JAMES SHEPHARD

"Each main world was inspired by a sub-genre of horror," says James Shephard, *Ghosthunter*'s creative director. "But more than that, everything we [the team] liked was an inspiration, beyond just the obvious horror references… [for example], the swamp level is influenced by every *Deliverance*-style redneck movie you've ever seen, the haunted-ship level was influenced by the *Poseidon Adventure* and a great B-movie called *Deep Rising*. The prison is a very obvious love letter to the movie *The Rock* as well as countless horror films, [whilst] the military base is a mix of *The Terminator, Half-Life* and an awesome Frank Miller comic, *Terminator Vs Robocop*."

It's *Ghosthunter*'s visual and conceptual creativity where it shines most. It has a stylised, almost comic-book aesthetic to it that strongly

» James Shephard, *Ghosthunter*'s creative director and producer.

» [PS2] Sir William Hawksmoor, voiced by Michael Gambon. The game's primary antagonist, this fright knight won't hesitate to get medieval on those who cross him!

SPOT THE DIFFERENCE

THE US GAME IS A LITTLE DIFFERENT TO THE EUROPEAN VERSION

How fun *Ghosthunter*'s gameplay was likely depended on which version you were playing. Originally released for the European market in December 2003, gamers in the US only got their hands on a version in August of the following year. Despite doing quite well in Britain, a poor showing in Europe left Sony unwilling to invest in an American release, with Namco picking up the slack instead. During this time the team were allowed to polish and refine *Ghosthunter*'s gameplay, addressing many of the complaints they'd received from feedback and adding a number of quality of life enhancements.

Amongst these changes were tweaks to the game's sometimes wonky camera system. A camera assist was added to Jones' general traversal mode, which allowed the camera to reposition itself more naturally when following him. Additionally, a separate calibration system was introduced for his aim mode, bringing the camera closer in to Jones when exploring tighter environments.

Combat also got some rebalancing, increasing the challenge whilst eliminating some of the frustrations. Jones' top speed during strafing mode was increased, offsetting what some players felt was the unfair agility of some of the ghosts, and controller response to player input was tightened. A subtle lock-on element was also introduced to the guns and Capture Grenade.

In all, according to one interview with SCE Cambridge, by the time the game was shipped to the US, the team had implemented over 1,500 fixes and enhancements.

bust these

ODIOUS OPPONENTS, ECTOPLASMIC ENEMIES AND FEARSOME FOES

IF YOU GO DOWN TO THE WOODS TODAY...

The game's iconic enemy, these toys-turned-terrors were encountered in the decaying mansion in the bayou level. The mansion was home to the ghosts of captured children, turned malevolent by their imprisonment. When threatened, they would transfer their consciousnesses into their bears, transforming into these grotesque monstrosities. These paranormal playthings would even use the children as clubs!

CASPER THE UNFRIENDLY GHOST

Concept artist Jason Wilson described these ethereal enemies as "based on the idea of the traditional sheet ghost, but meaner". These spirits would attack either by firing ectoplasmic energy from afar, or rushing directly at Jones to drain his life force. Most disturbingly of all, they could pose as weeping humans, bursting out of their mouths to show their true form.

UNLEASH THE KRAKEN

Taking inspiration from the creature in the film *Deep Rising*, the player would encounter this slimy sucker infesting the depths of a haunted WWII battleship. Once the ship's captain, this fishy customer turned traitor and has been battling its ghostly crew ever since.

TALLY HO, LADS!

Whilst exploring the ghost ship, Jones comes across Colonel Freddie Fortesque, a descendent of Sir Daniel Fortesque, the skeletal protagonist of the *MediEvil* games. Seems like dying is just a minor inconvenience for this family! Initially mistaking him for a stowaway, Fortesque later teams up with Jones to take down the dreaded beast of the ship.

THE TEXAS ALLIGATOR CHAINSAW MASSACRE

If there's three words you'd associate with 'bayou', it'd have to be gators, rednecks and chainsaws. Combining all three into one truly freaky opponent, these incorporeal crocs aren't, in fact, ghosts, but astral projections created by a local family of hillbillies. Not that this makes much difference when one's bearing down on you!

echoes the cartoonish look of the *MediEvil* franchise; not surprising, since the game's lead artist Jason Wilson worked on both. Indeed, much of *Ghosthunter* is best appreciated as a continuation of the work they'd done on *MediEvil*. "*MediEvil 2* was a Tim Burton-esque comedy horror game that paid tribute to classic gothic fiction," explains James. "The core team's idea for *Ghosthunter* was to do something in a similar space, but a little more realist, a little more adult, and as a homage to every ghost horror movie we loved in the modern age of cinema."

Graphically speaking, too, there's much to praise the game on. Whilst some of the larger spaces – the bayou and military complex in particular – look rather bland and empty even for a game of its time – when *Ghosthunter*'s firing on all cylinders it's a visual treat, with some impressive lighting and characterful environments on display. It's made all the more noteworthy in light of the fact that it was SCE's first PlayStation 2 game, with development proper having begun in the very same year the console came out.

"There were a lot of technical changes moving from *MediEvil 2* [on the PlayStation] to *Ghosthunter*," recalls Julian Rex, one of the game's lead programmers. "This was the team's first C++ and first PS2 project, so that was a learning curve for all of us. I remember receiving the PS2 dev kits was like Christmas meets the monolith from *2001: A Space Odyssey* all in one. We were now able to start developing enhanced environments, animations and audio, as well as technologies that were new for the studio, like portal rending, cloth, hair and grass simulations, and shadow projections."

In keeping with its horror themes, *Ghosthunter* also boasts a suitably ominous soundtrack, with a score that can change dynamically when the player enters combat. "We knew audio was going to be

» [PS2] Poltergeists were invisible enemies that could hurl objects at Jones. The player would have to make them visible in order to capture them.

» [PS2] Detective Anna Steele; Jones' supervisor who gets captured early on by Hawksmoor. Not a great start to a rookie's first day.

a huge part of the atmosphere, so it was important for us that the music fitted the action at the time," Julian recalls. "For that reason, we decided to invest in an interactive music system. At the time, my brother was a music producer, engineer and musician, so we reached out to him for his technical expertise. Along with helping to define the technology, he worked with his musician friends to create the score for the entire game."

The game's voice acting is another high point, and reflects the high ambitions the team had for *Ghosthunter*. "It was a moment in time when games were going to take over the world with the power of the PS2," says James. "We were thinking big; we originally wanted Brad Pitt for Lazarus and Alan Rickman for Hawksmoor!"

This proved a bit too ambitious, but the cast still includes a number of acting heavyweights. Chief amongst them was renowned thespian Sir Michael Gambon, who the team chose to cast after being impressed with his performance in *The Singing Detective*. Michael Played Sir William Hawksmoor, the malevolent spirit of a 13th century English knight and the game's primary antagonist. "A bit of a star name never hurts, of course," confides Jon Ashley, the game's writer and voice director, "but with Hawksmoor being very theatrical and a villain to relish, Michael was great casting. I'd incorporated some Shakespeare into his lines as a further enjoyable dimension. It was an honour to work with him, but a great pleasure too; he was very open to direction and a good laugh in the studio."

Accompanying him was Joe Morton, most well known for his role in *Terminator 2* as Skynet founder Miles Dyson, who *Ghosthunter*'s writers had opted to hire directly rather than casting for the role. Rather aptly, he played the voice of Lazarus' AI companion, as well as the scientist who created it. "Joe Morton is a great actor," says James. "There's a moment towards the end of the game where the living and digital versions of Professor Richmond have a scene together. When it was recorded in LA, Morton switched seamlessly between the two very different versions of Richmond in a single take; it was amazing to hear."

» [PS2] There are moments in *Ghosthunter* that show off some truly impressive lighting and art direction, making for a suitably spooky ambience.

» [PS2] Pressing a big red button on a mysterious ghost machine in an old basement is never a good idea.

» [PS2] Even in death, these Tommies will defend their ship to the last. Pip pip, boys, and God save the king!

» [PS2] *Ghosthunter* provides a salient reminder of an important life lesson; never trust creepy little girls in Victorian clothes.

» [PS2] Is everything alright ma'am? Don't worry, I'm a cop. We received reports of a disturbance… I think I'll come back later.

It's in two areas that *Ghosthunter* mainly falls down. The first is the gameplay. Though none are a dealbreaker, *Ghosthunter* had a number of small niggles that added up to create an experience that felt less slick than it should have been. Character movement was clunky at times, and the camera had a number of irritating quirks, such as spinning round to focus on Jones every time he walked through a door.

"I wish we'd had more time to focus test and refine the gameplay," James reflects. "The ghosts sometimes moved a little too fast for the player to shoot, the camera AI could be a bit temperamental, and we never quite nailed the Astral puzzle sections of the game."

> "Unbelievably, for a very brief moment my direct superior was Ken Kutargi, the creator of the PlayStation itself"
> JAMES SHEPHARD

The second problem is the game's inconsistent atmosphere and pacing, which can largely be attributed to how the project was organised. "It was one of the only times that I had received no brief for a project," James explains. "When we were beginning to concept the game, we lost our head of studio and our head of European development. Unbelievably, for a very brief moment my direct superior was Ken Kutargi, the creator of the PlayStation itself. So the *MediEvil 2* team had total freedom to make any game they wanted. This, I think, was one of the best and one of the worst things about *Ghosthunter*. We were a young talented team designing without commercial constraints, which gave the project some of its 'unique' characteristics."

The result was a game that, whilst taking inspiration from many different genres, never managed to settle on one enough to deliver a unified experience. "*Ghosthunter* took classic 'scary' movies – *Deliverance, The Shining* and so on – as its inspiration, but it was never so one dimensional," explains Julian. "It was never meant to be a shock-fest; humour and action played just as important a role… this caused problems later in the life of the project, as it became difficult to pigeon-hole the game. Was it horror? Was it comedy?"

Evidently, the developers weren't the only one confused by this, as *Ghosthunter*'s reception was a fairly mixed one when it came out.

"The thing I'm torn about is the tone and genre mash," says James. "At the time of its release, I think lots of people didn't really know what it was. Horror or comedy, action or stealth, it was a mashup. It was made for no one but ourselves. In fact, looking at it now, it very much follows the template of a modern Marvel Universe show. It's like watching an episode of *Wandavision, The Falcon And The Winter Soldier* and *Loki* one after the other. In this third decade of the 21st century genre mashups are far more widely accepted, so maybe it was ahead of its time."

Ghosthunter is a game you'd be hard-pressed to call a hidden gem, in the sense of it being some sort of forgotten masterpiece or cruelly under-appreciated work of genius. But its offbeat tone and neat visuals make it sufficiently interesting that anyone with a PS2, a spare weekend and a hankering for some campy horror action should check it out. It may not blow your socks off, but it certainly makes a few good bumps in the night.

Future Classic

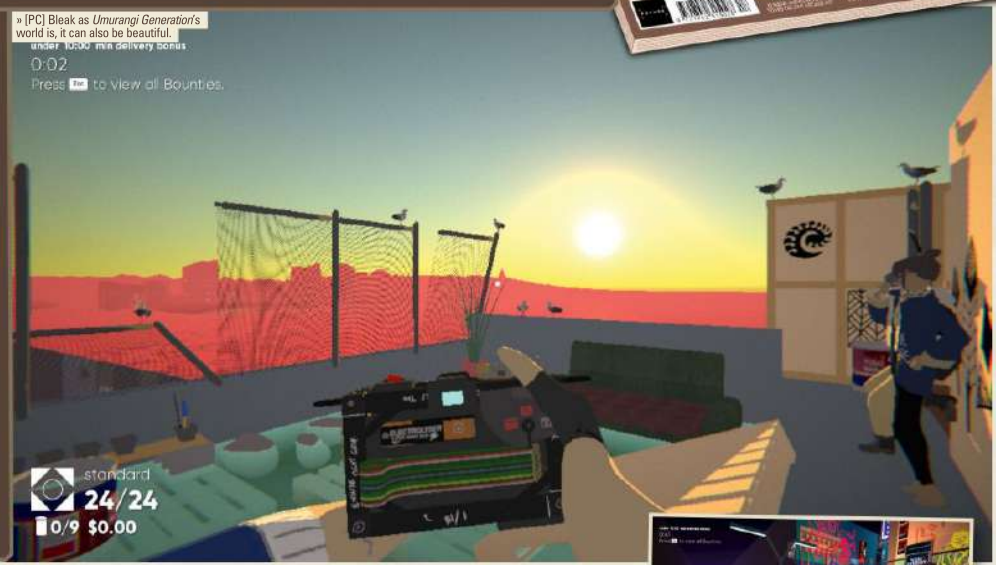
Modern games you'll still be playing in years to come

Info

- **System:** PC, Switch
- **Year:** 2020
- **Publisher:** Heart Machine
- **Developer:** Origame Digital
- **Key People:** Naphtali Faulkner

Go Deeper

- The devastating Australian bushfires of 2019 and 2020, which directly impacted the developer's family, were an influence on the game.
- *Umurangi Generation* is influenced by the philosophy of 'respectful design', which places heavy emphasis on the agency of communities.



» [PC] Bleak as *Umurangi Generation*'s world is, it can also be beautiful.

Move over Pokémon Snap, there's a new photography game in town. It's time to forget your Pikachus and Jigglypuffs, and embrace snapping urban decay in this game's self-described 'shitty future'

Words by Paul Walker-Emig

UMURANGI GENERATION

THE BACKGROUND

It's difficult to overstate just how much of an unlikely hit *Umurangi Generation* is. It is developer Naphtali Faulkner's first earnest attempt at making a videogame, his previous experience at coding composed of time working with Aboriginal communities in Australia on language apps and the odd small project. Not only is this his first game, but he completed it in only ten months. With next to no experience in game development and that incredibly short development time, he somehow managed to create a critically acclaimed hit that's earned a Nintendo Switch port and a host of awards, including the grand prize at the 2021 Independent Games Festival awards.

The idea for the game came from Tali's experience teaching a younger cousin how to do photography, which he felt resembled a videogame tutorial. This, he thought, would provide a great basis for a game. To this idea of teaching players how to do photography, Tali took inspiration from his Maori heritage, blending its imagery and concepts with a *Jet Set Radio* aesthetic to create a dystopian landscape intended to make us reflect on our governments' inadequate responses to contemporary crises like the COVID-19 pandemic and the climate crisis.

THE GAME

Each stage in *Umurangi Generation* comes with a list of objectives to complete: you might be asked to take a picture of some birds, a word, or an object, sometimes with the requirement to use a particular lens for the photo. You explore the level searching for these objectives, take your picture, and, once you've fulfilled the objectives (ideally before the time limit has expired), head to the level's exit.

The game gives you a whole host of options when it comes to how you take your pictures. As well as the aforementioned lenses – including fisheye, telephoto and wide-angle – the game allows you to manually

» [PC] We'll be honest, this picture of birds is here mainly to please Darran. [I am pleased – Ed]

» [PC] Look, this is about the best we can do when it comes to an arty picture, but the game gives you the tools to do better.

» [PC] It's pretty clear that all is not well in this future – a warning from the game about where we might be heading.

» [PC] Even in dystopia, you're not going to stop people dancing. Or trying to escape reality in one of those VR cafes on the street.

Things of note

A NEW WORLD

You can identify elements of cyberpunk and Japanese visual culture in the game's self-described 'shitty future', but its Maori inspirations help make it feel like nothing else out there.

SAVE TO DRIVE

Rather than saving your photos in-game, *Umurangi* saves them to a folder on your PC or your Switch gallery, helping them feel more like real photos.

CREATIVE KING

A series of unlockable lenses and post-processing effects give you the creative tools to create some really cool photographs.

TOP CLASS

The game is such a masterclass in environmental storytelling that it doesn't need to use any other devices to communicate its narrative.

SUBJECTIVE SCORING

An adaptive scoring system that rates you based on the kind of picture you are taking is a great way of giving you lots of freedom.

focus your shots and gives you access to a wide range of post-processing effects including bloom, saturation and exposure. Used in combination, there's an incredible range of possibilities in terms of what you are able to create, and you only need to head to social media to see the creative and artistic potential that lies in the game's photography system.

Masterfully, the game manages to balance giving you a structure that eases you into using the camera in a variety of ways, with a desire to encourage you to experiment with what is possible. Its scoring system, for example, adapts to the kind of picture that you want to create, so as not to try to force a situation where the game is pushing you to take pictures that it considers 'good'. If your picture features a lot of colours, the game will assume that you are trying to take a colourful picture, and give you a score multiplier based on the number of colours present. Conversely, if you are trying to take a muted, moody shot, the game will recognise that too, and adapt its scoring system to reward you for the lack of colour. It won't be long before you stop caring about the scoring system altogether and realise that the game just wants you to take the pictures you want to take.

As well as being a device used to take cool pictures, the camera has a more surprising function as a storytelling device. As you search the game's small urban areas for objectives and scan its details through your lens, you start to pick up on clues that give you a history and context for the place you are in. You slowly start to realise what has happened in the world and what kind of a place it is to live in. Halfway through the game, you might find yourself in for a bit of a shock as the threat this world is dealing with comes into full view. None of these events or backstory are related through dialogue, or big blocks of text. They are communicated solely through the environment. It's a truly impressive feat of storytelling and it's no surprise that the game has won praise and awards for its storytelling, despite the absence of what we might consider a 'story' in the traditional sense.

The result is a game that combines a clever and creative approach to narrative with a fun and satisfying photography system that successfully encourages us to think of photography as an artistic pursuit rather than a way of ticking off a list of videogame objectives.

WHY IT'S A FUTURE CLASSIC

People love taking photos in videogames. Look at the prevalence of photo modes in modern games and the subcultures around sharing those shots, or the enduring popularity of *Pokémon Snap* and the long clamour for a sequel before *New Pokémon Snap* was finally announced in 2020 and released this year. Given that *Umurangi Generation* has now taken the crown of best photography videogame of all time, this enduring but somewhat underserved love of photography in games ensures that *Umurangi Generation* will endure into the future and rightly be remembered as a classic.

It will also be remembered thanks to its powerful, award-winning storytelling, with themes that resonate strongly with some of the biggest problems of our age. It leaves an impression that's difficult to forget, the game filling our hard drives and Switch galleries with shots that serve as a reminder of our visit to the unique, beautiful, tragic and foreboding future.

MATT FURNISS

In an incredibly packed career spanning over 30 years, Matt Furniss has created many of the upbeat and bouncy tunes that accompany a slew of 16-bit games in particular. Retro Gamer talks to the audio expert about how he began in the industry, the tumultuous change to CD-ROM and more

Words by Graeme Mason

While the 8-bit era featured its own selection of tunesmiths – most notably Martin Galway, Ben Daglish, Rob Hubbard, Tim Follin and David Whittaker – it wasn't until the late-Eighties and the rise of the 16-bit machines that composers were really let loose with their keyboards and imaginations. When the Sony PlayStation and CD-ROM became the new storage medium in the mid-Nineties, every facet of games development changed considerably, not least the audio that could now be levelled up to include arrangements and compositions that completely mirrored their real-life counterparts. From his early days at Teque Software in Rotherham to working at The House Of Mouse, this is Matt Furniss, In The Chair.

Were you musical as a kid growing up?
Oh yes. At home we owned one of those ubiquitous wood framed organs with bass pedals and a rhythm box. I could read basic music notation and play a few tunes on it and I'd perform Christmas carols at the school nativity show. I could also play simple things on the piano and enjoyed listening to electronic music such as Jean-Michel Jarre and Kraftwerk. I became more interested in synthesisers and eventually upgraded to a Yamaha SY77 workstation.

Presumably videogames were a parallel love for you?
Absolutely. Growing up it was all about the ZX Spectrum and Commodore 64 and there were very few games consoles around. Like most of my pals, I had a Spectrum – the C64 was only for rich kids! Earlier, like many families in the Seventies, we had a *Pong* TV game. Very boring. Fortunately, I could rent an Atari 2600 or Mattel Intellivision with games from the local video shop, which I'd do as often as possible! Then, when the ZX81 was released, I got one of those. My dad would take me to a computer club run by British Telecom engineers where I got copies of ZX81 games such as *3D Monster Maze* and *Kong*. Not exactly the full arcade experience, but passable if you squint and use your imagination.

What games did you enjoy on your Spectrum?
I'd play anything and everything. I loved all the *Ultimate* games of course, but a couple of favourites I played more than anything were Steve Crow's *Starquake* and *Wizard's Lair*.

Which games first inspired you musically?
Konami's *Gyruss* is the first arcade game I remember hearing that had amazing music – an arrangement of Bach's *Toccata And Fugue*, similar to the version by Seventies prog-rock band, Sky. *Paperboy* and *Marble Madness* were another two games I thought had excellent music. Atari's arcade games always had superior sound hardware and brilliant compositions.

When did you first realise that you might want to get into the games industry as an audio designer?
One lucky day would change everything for me. In the late-Eighties I spent a lot of time missing school and loitering around a computer game shop in Sheffield. The shop was called Just Micro and it was a bustling Aladdin's cave of computers and games. It was owned by Ian Stewart who also founded Gremlin Graphics, both businesses located on Carver Street in Sheffield. Occasionally the Gremlin programmers would bring unfinished games down to the shop to show a preview of what they were working on.

That must have been very exciting!
It was. I remember playing an early version of *Auf Wiedersehen Monty* and being in total awe of the amazing Commodore 64 music. Then, one time in the shop, the manager told me Gremlin needed some urgent playtesting. I could go up to the development office and play games and my remuneration was a can of pop and a bag of crisps! So I went up and played *MASK* on the Commodore 64 for a bit – but what I really wanted to do was meet Ben Daglish.

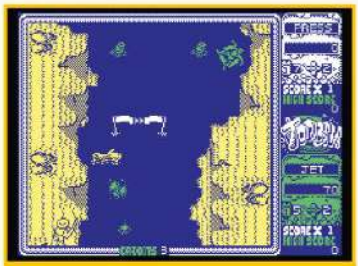
Ben was Gremlin's main sound designer – what did they say?
I asked and they said, 'Sure, he's over there in

“Like most of my pals, I had a Spectrum – the C64 was only for rich kids!”
Matt Furniss

SELECTED TIMELINE

GAMES

- **TOOBIN'** [1988] AMIGA, VARIOUS
- **LASER SQUAD** [1989] AMIGA, ATARI ST, PC
- **KLAX** [1990] AMIGA, VARIOUS
- **MANIX** [1990] AMIGA, ATARI ST
- **SPACE HARRIER 2** [1990] AMIGA, ATARI ST, C64
- **ROGUE TROOPER** [1990] AMIGA, ATARI ST
- **TORVAK THE WARRIOR** [1990] AMIGA, ATARI ST
- **TRIVIAL PURSUIT** [1991] MASTER SYSTEM
- **SEGA CHESS MASTER** [1991] MASTER SYSTEM
- **MAD PROFESSOR MARIATI** [1991] AMIGA, ATARI ST, ARCHIMEDES
- **PIT FIGHTER** [1991] AMIGA, ATARI ST
- **NEBULUS** [1991] ARCHIMEDES
- **CASTLE MASTER II** [1991] AMIGA, ATARI ST
- **CORPORATION** [1991] MEGA DRIVE
- **FACE OFF** [1991] AMIGA, ATARI ST
- **HILL STREET BLUES** [1991] AMIGA, ATARI ST
- **CHUCK ROCK** [1991] MEGA DRIVE, VARIOUS
- **GODS** [1991] ARCHIMEDES
- **RUGBY: THE WORLD CUP** [1991] AMIGA, ATARI ST
- **SWIV** [1991] ARCHIMEDES
- **ULTIMA VI: FALSE PROPHET** [1991] AMIGA, ATARI ST
- **TYRANTS** [1992] MEGA DRIVE
- **WOLFCHILD** [1992] MEGA DRIVE, MASTER SYSTEM, GAME GEAR
- **ALIEN 3** [1992] MEGA DRIVE, VARIOUS
- **BRAM STOKER'S DRACULA** [1992] MEGA DRIVE
- **CYTRON** [1992] AMIGA
- **EUROPEAN CLUB SOCCER** [1992] MEGA DRIVE
- **GALAHAD** [1992] MEGA DRIVE
- **GUNSHIP** [1992] MEGA DRIVE
- **JAMES BOND 007: THE DUEL** [1992] MEGA DRIVE
- **LEMMINGS** [1992] GAME GEAR, VARIOUS
- **MANCHESTER UNITED EUROPE** [1992] ATARI ST, VARIOUS
- **MORTAL KOMBAT** [1992] MEGA DRIVE, MASTER SYSTEM & GAME GEAR
- **OUTRUN EUROPA** [1992] MASTER SYSTEM, VARIOUS
- **PRINCE OF PERSIA** [1992] MASTER SYSTEM, GAME GEAR
- **ROAD RASH** [1992] MASTER SYSTEM, GAME GEAR
- **SHADOW WORLDS** [1992] AMIGA, ATARI ST
- **SHADOWLANDS** [1992] AMIGA, ATARI ST, PC
- **SUPER SMASH TV** [1992] MEGA DRIVE, MASTER SYSTEM, GAME GEAR
- **THE TERMINATOR** [1992] MEGA DRIVE, MASTER SYSTEM, GAME GEAR
- **ADVENTURES OF KID KLEETS** [1993] SNES
- **ALONE IN THE DARK** [1993] 3DO
- **ARABIAN NIGHTS** [1993] AMIGA, CD32
- **COOL SPOT** [1993] MASTER SYSTEM, GAME GEAR
- **DAFFY DUCK IN HOLLYWOOD** [1993] MEGA DRIVE, MASTER SYSTEM, GAME GEAR
- **EUROPEAN SOCCER CHALLENGE** [1993] ATARI LYNX
- **SENSIBLE SOCCER [1993]** MEGA DRIVE
- **SOCCER KID [1993]** AMIGA, VARIOUS
- **SPEEDBALL 2 [1993]** MEGA DRIVE, ARCHIMEDES
- **T2: THE ARCADE GAME** [1993] MEGA DRIVE, MASTER SYSTEM, GAME GEAR
- **WIZ 'N' LIZ** [1993] MEGA DRIVE, AMIGA
- **ZOOL** [1993] MEGA DRIVE, MASTER SYSTEM, GAME GEAR
- **BOOGERMAN** [1994] MEGA DRIVE
- **CHOPLIFTER III** [1994] GAME GEAR



» [Amstrad CPC] One of Matt's earliest compositions was the tune for arcade conversion *Toobin'*.

» [Master System] More sci-fi work with the title tune to the movie adaptation of *The Terminator*.

▶ that office.' Ben was so gracious and generous with his time and I was already a big fan and totally starstruck. We chatted for a while and he showed me his Atari ST-based setup. He was using Steinberg Pro 24 sequencer software to write his music and control his gear. Ben made me a copy of the software and that was the final piece I needed for my home setup. It was such a big inspiration meeting Ben Daglish – I'm sure my career path would have been a lot different had I not been fortunate enough to meet him.

Talking of career path – what was your first job in the industry?
In the summer of 1989 I left school and was offered a job at Teque Software/Krisalis in Rotherham. The first music I created there was for *Laser Squad*, an Amiga and Atari ST remake of the classic ZX Spectrum game. The same year I also worked on *Toobin'*, *Shadow Warriors* and *Chase HQ*. I played *Toobin'* a lot while converting it as we had an arcade machine in the office. *Hard Drivin'* I played only a couple of times in an arcade – it was hard, and expensive, one pound per credit! Then, the DOS version of *Laser Squad* was one of my first games working with Sound Blaster and Roland's LAPC-1 sound card.

How did you get the job at Teque Software?
I spent a lot of the summer that year sending out demo tapes of my Amiga demo scene music, to zero success. Then, to my delight, Teque replied to my application as they needed someone to make game sounds and digitise graphics. Teque was local to my home, only a bus ride away, and they took me on a trial for a month before hiring me full-time after that. I never did get to digitise any graphics, though.

With whom did you work most closely at Teque?
I worked with Shaun Hollingworth. We shared an office and an interest in music. I would design the sound editors and drivers and Shaun would program them.

How did the process work on those early arcade conversions? Did you try and copy the arcade music?
That's right, I'd convert the music by ear. If I had access to the arcade machine, I'd connect a tape recorder to the audio output, load up the operator sound test and record all the music and sound effects to tape. Then I would try and squeeze it all into the small bit of memory available for the home versions, and usually there wasn't enough memory for everything. But other times there would be space I could use for an original title screen tune.

Sounds like you were a big arcade fan?
Definitely. My favourites were from Atari and Sega. *720°*, *APB*, *Out Run*, *After Burner* and so on. I remember one summer we went to Alton Towers and I spent most of the day ignoring the rides and hanging out around the arcade, just staring at *Space Harrier*, astounded by its incredible sound and graphics.

What machines did you use to create your sound effects and music?
Most of my development software ran on an Atari Mega ST – basically a regular ST but with more RAM. Shaun Hollingworth [*Way Of The Tiger*, *Bounder*, *Pac-Mania*] wrote the software and built custom hardware for the Sega and Nintendo consoles. For Amiga audio, I used an A500 with 20MB HDD and Pro Tracker, as did many composers back then.

What was your own first home computer love?
Actually, the Amiga wasn't my first love. A couple of years prior I did buy an Atari ST, mostly to play games. As a stand-alone audio machine the ST was pretty weak. It did however include standard MIDI ports, allowing it to be connected to digital instruments such as synthesisers, drum machines and samplers. So my setup was the Atari ST and a nice Yamaha

» [Amiga] Creating Eastern-themed tunes for the Amiga game, *Arabian Nights*.

SY77 synthesiser, but I had no sequencer software to control it. At that point I was pretty disappointed and would have preferred to own an Amiga.

Which of the Atari ST and Commodore Amiga was better from an audio designer's viewpoint?
The Atari ST's built-in sound hardware was quite weak other than the included MIDI ports. It was a very basic sound chip even for 1985. The Amiga, on the other hand, was far superior and still sounds great today!

Which other composers and musicians did you admire or influence you?
Most of my influences back then came from other videogames musicians. Rob Hubbard, Martin Galway, Ben Daglish, Maniacs Of Noise, Tim Follin, Yuzo Koshiro. I was a big Amiga demo scene fan too – some of those old demos have incredible music.

Did you try and ensure each musical composition was sufficiently different to your other work?
I tried, but it was always difficult. I developed a funky, percussive style which is reflected in most of the games I worked on. Fortunately, quite a lot of my work was conversions and arrangements from other composers – it added variety and helped alleviate any writer's block.

How was publisher interfer- erm, guidance back then?
There was very little guidance and I loved it! Publishers just wanted the audio done on time and easy for the programmers to implement. It was about a 50/50 split on original compositions and conversions and amazing how much latitude I was given to improvise or arrange the original music.

In the early Nineties you moved to console development, specifically Sega's Mega Drive. What was that period like?
I loved creating sound for the Mega Drive. At Krisalis we didn't have access to the official Sega sound development kit or even GEMS, which many US-based composers used. Shaun Hollingworth again came through and created a custom audio dev system, hardware and driver – and it sounded amazing! Especially the sampled audio, which I still think is some of the best heard on the Mega Drive. I wrote quite a lot of Sega Master System and Game Gear music, too. A few titles on Super Nintendo and 3DO and even the music for an Atari Lynx game, *European Soccer Challenge*.

> "Konami's Gyruss is the first arcade game I remember hearing that had amazing music"
> Matt Furniss

You were banging out a lot of tunes in this period – was it hectic?
At the time it didn't seem hectic. But looking back at how much work I did, it must have been. I usually had four or five projects on the go, and would have only had a couple of weeks to complete each job.

Talking of Shaun Hollingworth and his system – do you have a favourite memorable project on the Sega Mega Drive using this?
One of the more memorable was *The Terminator*. It was the first time I really dialled-in the sound and made the Mega Drive sound good, or at least a lot better than my projects that preceded it. Brad Fiedel's movie soundtrack really suited the Mega

MAGIC MATT

Retro Gamer taps its feet to some of Matt's greatest work over the last 25 years

CASTLE MASTER
(1991) Amiga, Atari ST

■ By the fourth game in its *Freescape* series, Incentive Software had turned developer for the 16-bit versions, letting Domark take care of the game's distribution and marketing. This is where Matt came in, assisting with the game's music, a role he was uncredited for at the time. The main theme is the highlight of Matt's work here and an amazing piece for such an inexperienced composer. With one short composition, Matt manages to convey the challenges that lay ahead of the player, the notes reverberating as if bouncing around the stone-hewn walls of the eponymous structure. The music effortlessly changes between this slow beat to a faster rhythm that tells you there's going to be plenty of action in *Castle Master*.

ALIEN 3
(1992) Mega Drive, Various

■ From its ominous beat-beat intro to its whole range of spooky yet action-packed tunes, the soundtrack to this Mega Drive platform film licence is as removed from the theme and plot of the movie as the gameplay itself. Wielding a pulse rifle, Ripley deftly negotiates the tunnels and corridors of the movie's prison planet, taking care of the rampant resident xenomorph population with ease. The first level's low-key tune gives way to more energetic harmonies as the game progresses, yet it's that sparse intro theme, complete with *The Terminator*-style portentous beats that resonates the most, although *Meet The Alien*, the short clip that accompanies the first slobbering xeno seen by the player is a joy to behold.

EUROPEAN CLUB SOCCER
(1992) Mega Drive

■ While the game itself is an unsubtle reimagining of Krisalis' earlier footie sim, Manchester United Europe, Matt's music, especially the game's stunningly fluid and groovy title theme is a brilliant boost to the overall vibe. Also known as *World Trophy Soccer* and *J League Champion Soccer*, *European Club Soccer* presents the action in an antiquated pre-*FIFA* side-on view, and while it's visibly an improvement over top-down games such as *Sensible Soccer* and *Kick Off*, there's a distinct lack of the free-flowing football that made those games so beautiful to play. As with the majority of Matt's work, however, you'll be drumming your fingers to the pinging sounds that emanate from Sega's console.

WIZ 'N' LIZ
(1993) Mega Drive, Amiga

■ Developed by Raising Hell Software – before it morphed into Bizarre Creations – *Wiz 'N' Liz*, subtitled *The Frantic Wabbit Wescue* is one of the cutest and craziest Mega Drive platform games out there. Playing one or both of the title characters, the players traverse several fantastical landscapes, wescuing wabbits while collecting fruit. Unlike many of its peers, *Wiz 'N' Liz* is a non-stop platformer that forces players to, erm, wiz through each level as quickly as possible and Matt's music, created especially for the Sega console, perfectly replicates that theme. From the jaunty tune that greets the player when they enter the hub section to each level's bespoke jingle, there are tunes to keep those feet tapping.

PUGGSY
(1993) Mega Drive, Amiga

■ This Traveller's Tales and Psygnosis puzzle-platform game has a series of varied and colourful locations and Matt does each one justice with the appropriate tune. From the chilled-out vibe of the game's Beach level to the trippy pulses of Badger Mill, the odd puzzles and graphics blend perfectly with Matt's sprightly and bouncy music. However, our favourite is the impeccable game completion skit and its attendant theme, an effervescent sally from the talented composer that congratulates the player with its triumphant range of upbeat notes and flurries. A perfect aural conclusion to the adventures of that most clever and laconic alien and another fine effort from the audio expert.

SELECTED TIMELINE

- **DINO DINI'S SOCCER** [1994] MEGA DRIVE
- **LEGENDS** [1994] **AMIGA,** CD32, PC
- **MICKEY MANIA** [1994] MEGA DRIVE, SNES, MEGA-CD
- **MORTAL KOMBAT II** [1994] MEGA DRIVE, VARIOUS
- **SABRE TEAM** [1994] AMIGA, VARIOUS
- **STREET RACER** [1994] MEGA DRIVE, SNES
- **ASSAULT RIGS** [1995] PLAYSTATION
- **MANCHESTER UNITED CHAMPIONSHIP SOCCER** [1995] SNES
- **NANOTEK WARRIOR** [1997] PLAYSTATION
- **NIGHTMARE NED** [1997] PC
- **TOY STORY** [1997] PC
- **CYBERSTRIKE 2** [1998] PC
- **NCAA GAMEBREAKER '99** [1998] PLAYSTATION
- **COOL BOARDERS 4** [1999] PLAYSTATION
- **FEAR EFFECT** [2000] PLAYSTATION
- **NHL FACE OFF 2000** [1999] PLAYSTATION
- **COOL BOARDERS 2001** [2000] PLAYSTATION
- **CRUISIN' EXOTICA** [2000] NINTENDO 64
- **EXCITEBIKE 64** [2000] NINTENDO 64
- **MLB 2000** [2000] **PLAYSTATION**
- **NFL GAME DAY 2001** [2000] PLAYSTATION 2
- **WOODY WOODPECKER RACING** [2000] PC
- **SPIDER-MAN** [2001] PC, DREAMCAST
- **FEAR EFFECT SEDNA** [2017] PS4, VARIOUS
- **STUNT CAR RACER** [2019] BBC MODEL B

MADE IN SHEFFIELD

How a Sheffield legend in the making met a Sheffield legend made

As a Gremlin alumni (sort of), Matt features in the first volume of Bitmap Books' and Mark Hardisty's brilliant tome, *A Gremlin In The Works*, charting the history of the Sheffield-based software house from 1983 until 2015. It's a suitable inclusion considering the audio specialist was also born in Sheffield, ten years prior to Gremlin's inception. "Demos went off on cassette to lots of software houses," recalls Matt in the book. "I did get an interview at Vektor Grafix in Leeds, but no work offer. I don't recall sending anything to Gremlin. Perhaps I should have. But any job would have been great." Unsurprisingly, Mark asks Matt about his career-defining meeting with Ben Daglish. "It was a huge deal for me to meet him. He got me interested in creating music for the flourishing demo scene. So I went out and bought an Amiga with an early version of SoundTracker to write some tunes." Finally, while **Retro Gamer** has shied away from asking Matt his least favourite hardware to develop for, author Mark Hardisty has no such qualms. "The SNES! It was awful and constrained by a very small amount of memory." Oops. Nobody tell Nintendo.

A Gremlin In The Works is available now from bitmapbooks.co.uk. Image courtesy of Sam Dyer and Bitmap Books.

Drive sound hardware, although in hindsight I should have used more music from the movie.

Any other favourites from this time?
Puggsy, Mortal Kombat II, Mickey Mania, Alien 3. They were great to work on, and excellent games too. *Wiz 'N' Liz* was a favourite – it's got lots of different music and is a really fun and fast game.

Did movie licence work involve creating your own tunes, adapting film music or both?
I'd prefer to use the movie soundtrack and arrange it for the game, but that wasn't always possible due to licensing. *Predator 2*, for example, was original music and being my first Mega Drive music, it's not very good. On the flip side, Probe did a great job converting *Mortal Kombat II* to the home consoles. I was tasked with bringing Dan Forden's incredible music to the home systems and I had to do it by ear from DAT tape recordings. The Mega Drive's sound hardware was not as powerful as the *Mortal Kombat II* arcade machine's, so I used a bit of artistic licence to arrange the converted soundtrack. The Sega 32X audio is much closer to the arcade with more digitised speech and sound effects from the original game.

You worked on a couple of less popular systems such as the 3DO – what was that like?
I had a very short-lived 3DO – I was sent a dev kit from America that I fried by connecting it to 240 volts! [We've all been there – Ed]

Oops! Moving quickly on, did you usually see games running in order to compose the audio or work off screenshots and descriptions?
Early on it was normal to have only a text description of the game. I'd receive a fax at the office containing game details and what was needed audio-wise. Finished audio was stored on a floppy disk and returned via the post. If the game was being developed in-house we generally had the arcade machine in the office. I could hook up a tape recorder to the audio output and capture original sounds from the machine's diagnostic mode. A few years later, a modem was acquired and I set up a BBS [Bulletin Board System]. Developers would upload ROMs to me and I would run them on my local development kit. They would download audio from me and then include it in the game.

By 1992 you were working on a *lot* of games but eventually moved on from Teque/Krisalis. What happened?

» [Mega Drive] Pick it and flick it, accompanied by Matt's funky tunes.

> "At Sony, most of my output was sports games featuring licensed music from popular music artists and bands"
> Matt Furniss

I was working at Krisalis until 1994, but the 16-bit work was drying up around that time as publishers switched to next generation CD-ROM consoles. I then took a job at one of Sony's studios in Gloucestershire, working on new PlayStation games such as *Assault Rigs, Darkstalkers* and *G-Police*.

What was audio development like on the PlayStation?
Sony's official PlayStation One audio dev system was pretty awful. It was an Apple Mac expansion card and software. The system was really buggy and it crashed all the time.

Can you remember what your first CD-ROM tune was?
I'm not certain but it could have been the 3DO version of *Cannon Fodder* or maybe *Soccer Kid*.

What did the shift to CD-ROM mean for you?
When CD-ROM arrived, we invested in 'proper' studio gear like a multirack, mixing desk and sequencer. It wasn't easy; I had no training on how to operate the equipment so learned it all on the job. It also meant the end of the 16-bit era and a few cancelled projects – I was working on Mega Drive versions of *Blood Money, Shadow Of The Beast III* and *Bill's Tomato Game*. The latter was eventually ROM dumped after a prototype dev cartridge appeared on eBay.

Having worked extensively with the CD-ROM format, what was it like going back to cartridge with games such as the Nintendo 64's *Excitebike 64*?
That was a bit of unexpected luck. Leftfield's [*Excitebike*'s development team] audio guy became

I AM THE WISE OLD MAN. SEEK MY
COUSINS FOR HELPFUL HINTS. BY
THE WAY, THE MEDICINE MAN YOU
SEEK LIES ACROSS THE RIVER.
PRESS F1 AT ANY TIME TO VIEW
THE MAP.

» [Amiga] RPG duties with the Amiga game, *Legends*.

» [Amiga] Fame at last as Matt himself takes part in *World Trophy Soccer* on the Amiga.

» [Dreamcast] In an incredibly varied career, Matt has produced audio for many formats, including his Spider-Man score for Sega's Dreamcast.

unavailable midway through development so they asked me to step in and finish the project.

Why did things slow down in the late-Nineties?
In 1996 I moved to the USA to work for Disney Interactive and later, Sony's 989 Studios in San Diego. CD-ROM had arrived and made it possible for any composer to write videogame music. The requirement of technical ability and size constraints became a non-issue. The teams became much larger and development cycles were longer. At Sony, most of my output was sports games featuring licensed music from popular music artists and bands.

In 2010 you reunited with an old colleague from the Mega Drive days, David Perry.
I received a message from a recruiter who was hiring developers for a new start-up in Aliso Viejo, California, called Gaikai. At the time I was actually living in Aliso Viejo while working as a software engineer for Fox Interactive Media in Santa Monica.

Crikey, that's a commute and a half!
A 120-mile round trip – in Los Angeles traffic! I was ready for a move to something closer to home. As for Gaikai, it was developing a new technology to allow gamers to stream games from remote servers without requiring large downloads. I was interested, replied and then it was revealed that one of the Gaikai cofounders was David Perry with whom I'd worked with briefly on *The Terminator*. After a quick meet and greet, Gaikai hired me as their first front-end web developer. What a small world!

What did that role entail?
I built the code which allowed Gaikai's game streaming to run on any web browser or website. A few years later, Gaikai was acquired by Sony and rebranded as PlayStation Now – I was back at Sony for a third time. That was pretty good fun and I saw us grow from 15 people to over 200.

What were the most fun projects to work on?
The most fun games were the ones that needed original music and where I had creative control. Such as, *Puggsy, Alien 3, Wiz 'N' Liz, The Terminator* and *Soccer Kid*.

And conversely, which were the most onerous projects that you can remember?
Most of the time-consuming projects were for American publishers. They would often have a hierarchy of producers and game directors to satisfy, which usually meant revisions and edits.

How has the role of musician and audio designer changed during your career?
In the beginning, it was just me writing all the music and sound effects with very little oversight. I just did the work and usually it would be added to the game as-is. When I began working with larger publishers like Sony and Activision, there was more collaboration with producers, creative directors and other sound designers. They would have more influence on the sound design and it could be more difficult. But the end result was sometimes worth it.

I think we may know the answer to this one – what period do you look back on most fondly?
The Sega Mega Drive days, definitely – a golden era for me. I loved that console and even bought a Japanese import before they were available in Europe. Playing the games and hearing all the amazing music coming from Japan was special, as was the challenge of pushing the hardware to the limit. In the early Nineties I saw a magazine advert for a console import shop – they had all the latest hardware and games from Japan such as PC Engine, Super Nintendo and Mega Drive. The shop's address was in Newcastle-Under-Lyme. I'd never heard of the town and assumed the advert had misspelled Newcastle-Upon-Tyne. So I went there instead – stop laughing – and unsurprisingly I couldn't find the store. It was an extremely long drive from Sheffield. Don't do what I did, read a map!

Is there anything you'd do differently looking back on it today?
I'd have a wider taste in music and learn more music theory. Maybe work collaboratively more with other artists. And be nicer to everyone – I learned too late that you get more with sugar than salt.

You're no longer directly involved in the videogames industry – do you miss it?
I don't miss the games business particularly, no. From what I hear, working for a large developer these days can be a bit of a grind. I'm fortunate to have been around in the golden age of gaming; but working for Gaikai and Sony for the third time was pretty good as well. I felt part of the videogame business again without the pressure of being a game developer. ★

Our thanks to Matt for his time.

YOU ASK THE QUESTIONS

Readers can get involved at www.retrogamer.net/forum

Merman: Did you program any of your own sound or music routines?

No, my programming skills were very basic and I didn't know how to write sound drivers. I used existing SoundTracker playback routines for Amiga music. Fortunately I worked with Shaun Hollingworth and he knew all about it.

Eric: I really enjoyed your music for *Alien 3* and *European Club Soccer*. What was it like moving between different styles?

I have many, so it's hard to choose a favourite. I'll go on record and say Tim Follin's music was always hugely impressive to me. Brilliant compositions and a really slick audio driver by Ste Ruddy. On hearing Tim's multi-channel music on the Spectrum I was astounded. Then, on the Super Nintendo, his *Plok* and *Spider-Man And The X-Men In Arcade's Revenge* soundtracks are amazing!

RichL: Which system did you prefer creating music for, the Amiga or Mega Drive?

There were countless great Europe-based composers of Amiga music whereas Mega Drive composers in Europe were few and far between. But I preferred writing for the Mega Drive; I loved the Eighties sounding synthesis and it felt more exclusive seeing as Sega's official dev kits were not easily available. With limited memory available for audio, it was easier to write great sounding music on the Mega Drive than Amiga.

Beach Spikers

THE ONLY GAME WHERE SPIKES AREN'T HARMFUL

» GameCube » 2002 » AM2

Back when I was a kid, I often used to find myself killing time at the local sports centre after karate, while my dad trained in the adult class. If the club owner's daughter wasn't around and I was on my own, I'd usually pop down to the foyer – I could marvel at the arcade games I rarely had money to play, or hope to catch a glimpse of Ace from *Gladiators* in the free weights room. But every so often, the chap who ran the volleyball club in the main hall would very kindly open up his sessions and teach basic techniques to those of us with nothing to do, and I developed a little bit of a fondness for the sport as a result.

Sadly, volleyball is a sport that has rarely received brilliant videogame representation, with releases generally being rather few and far between. Apparently though, volleyball games are like buses as a neat little batch of them turned up in 2002 and 2003. Since *Outlaw Volleyball*, *Summer Heat Beach Volleyball* and *Dead Or Alive Xtreme Beach Volleyball* didn't make their way to the GameCube, *Beach Spikers* was the one I picked up. Of course, this being beach volleyball, it wasn't the sport I remembered from childhood – teams comprised of two players rather than five, and there was sand everywhere. Oh, and since it was that particular time in gaming history, the box cautioned that the "fast, furious all girl action could leave you breathless", while the game proper featured weirdly affectionate celebratory hugs.

Questionable marketing aside, the game was also criticised for the fairly basic nature of its single-player World Tour mode. But none of that really mattered to me, since what I wanted was a volleyball game that would be easy for my friends to join in with, and that's what I got. It's really simple – the better the position you're in when you receive the ball, the more accurate your passes and the more powerful your shots. Anyone can understand that, and that's why I'd consider busting it out any time I have a group of friends handy.

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>> This month we look at two new Evercade carts, learn about the ultimate history of videogames and discover if Blaster Master Zero 3 is a worthy sequel

»[Evercade] *Worms Armageddon* is so good it makes the included version of *Worms* rather redundant.

Evercade Multi Game Cartridges

HOW DO THE LATEST RELEASES FROM BLAZE COMPARE?

INFORMATION

- **FORMAT** EVERCADE
- **RELEASED:** OUT NOW
- **PRICE:** £14.99
- **PUBLISHER:** BLAZE ENTERTAINMENT
- **DEVELOPER:** VARIOUS
- **PLAYERS:** 1

We're still a couple more months away from the release of the Evercade Vs, but Blaze Entertainment is doing its best to ensure you have plenty to play on its new console when it finally appears this November. The latest two cartridges we've received are *Worms Collection 1* and *Indie Heroes Collection 1* and as usual we'll look at what the cartridges share in common before diving into the contents of each individual release.

In terms of presentation both carts feature everything we've come to expect from the Evercade brand. As usual they feature a colour manual, with the *Worms*' manual benefitting the most due to only featuring three games, meaning there's plenty of space to dedicate to how they each play. The *Worms* pack also features a double-sided poster, while the *Indie Heroes* pack includes stickers. We love these physical additions and hope it continues with future releases.

Emulation is up next and it's just as you'd expect. Mega Drive, PlayStation, GBA, NES and Game Boy are covered across the two carts and we've not seen any noticeable issues while playing on either the handheld or when connected to a TV. There's still no 1:1 scaling option, meaning games across both carts look quite fuzzy and shimmery on a TV at 720p, but it's far less noticeable when playing in handheld mode. It remains annoying that such a simple option still hasn't been implemented, though.

Every game has the usual load and save state options, but we noticed something quite disappointing on *Indie Heroes Collection 1*. The save states for seven of the included

»[Evercade] Both cartridges feature nice menu borders, as well as full-colour printed manuals.

BRIEF HISTORY

» The Evercade was released in early 2020 and proved a solid hit thanks to its robust performance and a selection of genuinely great curated cartridges. The *Indie Heroes* and *Worms* collections mark the 17th and 18th cart releases, with several more being released in the following months. A home console system called Evercade Vs is due for release this coming November.

»[Evercade] *Foxyland* is a great platformer with some neat puzzle mechanics thrown in for good measure.

PICKS OF THE MONTH

DARRAN

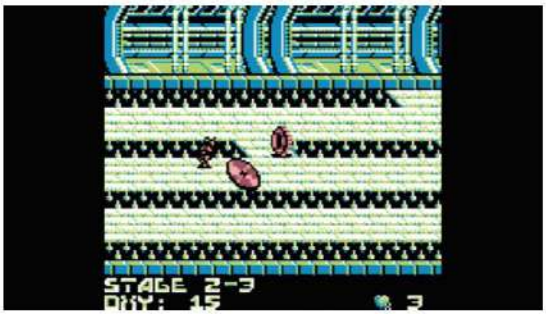
Zool Redimensioned

I don't think it's aged particularly well, but this is a solid enough update that's certainly kept me distracted for a few hours.

NICK

Piczle Puzzle & Watch Collection

Give me old-style logic puzzles and a calm, relaxing soundtrack, and I'll be a happy man nine days a week.



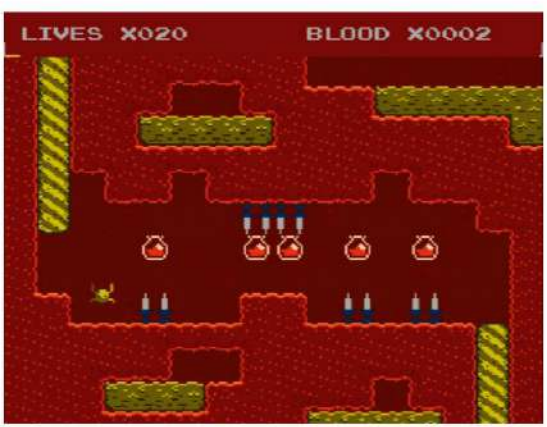
»[Evercade] Proper 1:1 scaling and scanlines should hopefully sort out games like *Chain Break* which look quite ugly on a TV.

games don't load when played in TV Mode, meaning you have to start from scratch and make new saves. Those saves won't appear once you return to playing in handheld mode, which feels like a huge oversight on Blaze's part. We've been assured it will be fixed with a patch, but it feels sloppy and is something that should have been caught during playtesting.

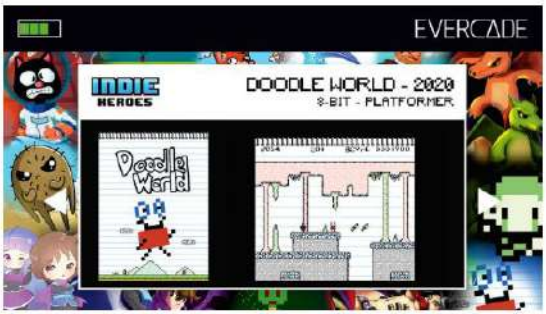
The *Worms* cart is the first one we'll look at and if we're honest we're quite disappointed with it. It's rather anaemic for an Evercade offering, with only three games available: *Worms*, *Worms Armageddon* and *Worms Blast*, although it must be pointed out that the games on offer represent some of the best *Worms* games you can play from the period. Perhaps the biggest issue, particularly with the Mega Drive version of *Worms*, is that it's just not super fun to play on your own. The AI is solid enough, but the games truly shine in multiplayer. Passing the Evercade around works fine, but it's not as practical when playing on the TV.

A far bigger issue with the game is that its tiny sprites don't hold up particularly well when played on the Evercade itself. Granted you can stretch the resolution to fill the screen, but it just ends up looking rather ugly as a result. And then of course there's the inclusion of *Worms Armageddon* (the PlayStation version), which is an excellent game that makes the inclusion of *Worms* itself rather redundant, as it has superior weapons and options and even some decent single-player content. It's slightly easier on the eyes as well, due to the chunkier sprites and most of our time with the cart has been spent playing this.

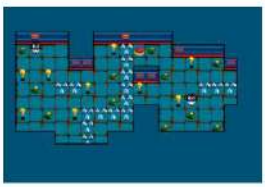
The final game is *Worms Blast*, which originally appeared on the Game Boy Advance. It's effectively a spin on the *Puzzle Bobble* series and it works pretty well, offering some solid puzzling once you get past the rather laborious tutorial. Aside from the lack of games, the biggest issue with the *Worms* pack is it feels like it's going to be better suited to the Vs, due to its focus on multiplayer.



»[Evercade] *Flea!* has proven to be our most played game on the *Indie Heroes* cart. It's absolutely fantastic.



»[Evercade] *Doodle World*, *Flea!*, *Kubo 3*, *Ploid*, *Super Homebrew War*, *Twin Dragons* and *Uchusen* were all affected by save issues when played in TV Mode. Hopefully the promised update will fix it.



»[Evercade] If you like puzzle games we recommend *Alien Cat 2*. Its later stages get exceptionally clever.

»[Evercade] We struggled to play *Worms* due to the tiny screen and the cumbersome control system.

As a result it feels currently hard to recommend unless you absolutely love the *Worms* series.

The *Indie Heroes* pack on the other hand is probably one of the best Evercade carts we've encountered, thanks to a solid selection of games. Platform fans are well catered for with the likes of *Twin Dragons*, *Flea!*, *Foxyland*, *Doodle World* and *Ploid*. *Flea!* is terrific fun and has you navigating a constantly moving flea around deviously designed stages, while *Foxyland* is equally entertaining and features some light puzzle mechanics. *Doodle World* is a *Super Mario Bros* clone with a distinctive crayon and paper aesthetic, while *Twins Dragons* is a fun platformer that reminds us a little of *Mayhem In Monsterland*. That leaves *Ploid*, which is just an OK take on *Mega Man*.

If you're into adventures there's a few to choose from. *Anguna: Warrior Of Virtue* is an engaging action RPG with some great visuals, *Deadeus* is a really good horror game with a solid story and multiple endings, while *Quest Arrest* blends RPG and point-and-click elements to a police theme, but is peppered with childish swearing. All three games are entertaining adventures and will keep you busy for a good long while.

The rest of the 14 games comprise of *Super Homebrew War*, a fun take on multiplayer games like *Towerfall*, which should really come into its own on Vs, *Kuba 3*, a bland action adventure game, *Chain Break*, a fun take on *Metro-Cross*, *Debtor*, which has some solid, but frustrating puzzling, *Alien Cat 2*, a fantastic tile-based puzzler and *Uchusen*, a dreadfully bland shmup with terribly clunky controls. Despite a few weak links the general pack is full of quality titles, easily justifying its £14.99 price point.

In a nutshell

While it's hard to recommend *Worms*, *Indie Heroes* has some truly cracking titles on it. Once the save issues are fixed it has the potential to be the strongest cart in the current Evercade line-up.

>> Score **82%**

>> Score **60%**

PICK OF THE MONTH

Picross S: Mega Drive & Master System Edition

» **System:** Switch » **Buy it from:** Online » **Buy it for:** £8.99

We've always found *Picross* to be a fun and rather relaxing puzzle game, and have spent many hours drawing pictures by using numerical clues to fill in boxes on a grid. Jupiter has been behind a dependable line of entries in the series for quite a while now, but retro gamers are likely to get an extra kick out of this version, in which the logic puzzles all form sprites from Sega's classic console games.

The game offers a decent amount of variety and plenty of puzzles, with 480 split across four main modes. As well as standard Picross, there's Mega Picross in which clues can connect across adjacent lines, Color Picross in which squares must be filled with specific colours, and Clip Picross, in which you solve a large puzzle comprised of multiple smaller puzzles. The tutorials are thorough and there are hint options in case you get stuck, as well as a high-contrast mode for players who may otherwise struggle with Color Picross.

Sega fans will be pleased to see not only the likes of *Sonic* and *Streets Of Rage*, but also deeper cuts like *Action Fighter* and *Eternal Champions*. However, if you're not already familiar with the games represented, there's no information to contextualise what you're seeing. Tunes from *Out Run, Space Harrier, Alex Kidd In Miracle World* and *Fantasy Zone* play while you solve puzzles – it's just a shame the soundtrack is limited to those four classic tracks.

Maybe we're greedy, but we can't help but want more. It just feels as though the Sega tribute could have been pushed a bit further, to create a game that would better encourage players to explore the games it celebrates. Even so, everything present in *Picross S: Mega Drive & Master System Edition* is made to a high standard and you'll definitely get plenty of play time for your money, so it's very easy to recommend picking this up.

» Score **84%**

»[Switch] Grids come in a variety of different shapes and sizes, from tiny 5x5 grids to some 20 squares wide.

»[Switch] Clues in the colour puzzles work differently, making them a bit harder to beat in general.

Blaster Master Zero 3

» **System:** Switch (tested), PS4, Xbox One, Xbox Series X/S, PC » **Buy it from:** Online » **Buy it for:** £13.49

Inti Creates has done a great job in reviving the *Blaster Master* series, and this third game is another success. The game switches between platform blasting areas and top-down dungeons, with further progress in previous areas made possible by collecting upgrades. The pixel art is inspired by NES games and looks excellent, and the music is great too. It's a very good game, but one aimed at series veterans – the controls are relatively complex and you'll need to master them from the off, as the enemies don't pull any punches. If you're an existing fan of the series you'll probably appreciate the challenge, but newcomers are best advised to hold off on this one until they've mastered one of the earlier games.

NICK THORPE

» Score **84%**

The Ultimate History Of Video Games: Volume 2

» **Buy it from:** amazon.co.uk
» **Buy it for:** £18.99

Steven L Kent has finally written a sequel to his original classic and it's another great read and the perfect complement to his first book. Filled with excellent quotes, "The Emotion Engine – the only emotion I got from it was despair," and fantastic anecdotes, it's a marvellous read that does a fantastic job at looking at the games and franchises that came to dominance from the release of the PlayStation 2 onwards. In general it does a terrific job of covering as much of gaming's history as possible during this period, from the bombing of the N-Gage to Microsoft's entry into the console market and the huge success of the Wii, thanks to excellent interviews and tireless research. Steven's book is a great read that should find its way to every gaming bookshelf.

DARRAN JONES

Space Invaders Invincible Collection

» **System:** Switch (tested) PS4
» **Buy it from:** Online, retail » **Buy it for:** £54.99

While it's not quite as comprehensive as we'd like, we've still had a lot of fun blasting our way through Taito's pricey compilation. The *Invincible Collection* has been coded in-house and has excellent emulation, numerous graphical options and online leaderboards for a large number of the included games. Highlights of the package include *Space Invaders Extreme, Majestic Twelve* and *Space Invaders DX*. Older titles like the original *Space Invaders* now benefit from a new Challenge Mode which gives tasks ranging from getting a high score to surviving a time limit, while the presentation is lovely. It's just a shame there aren't historical documents and a few extra games to justify the high price.

DARRAN JONES

» Score **70%**

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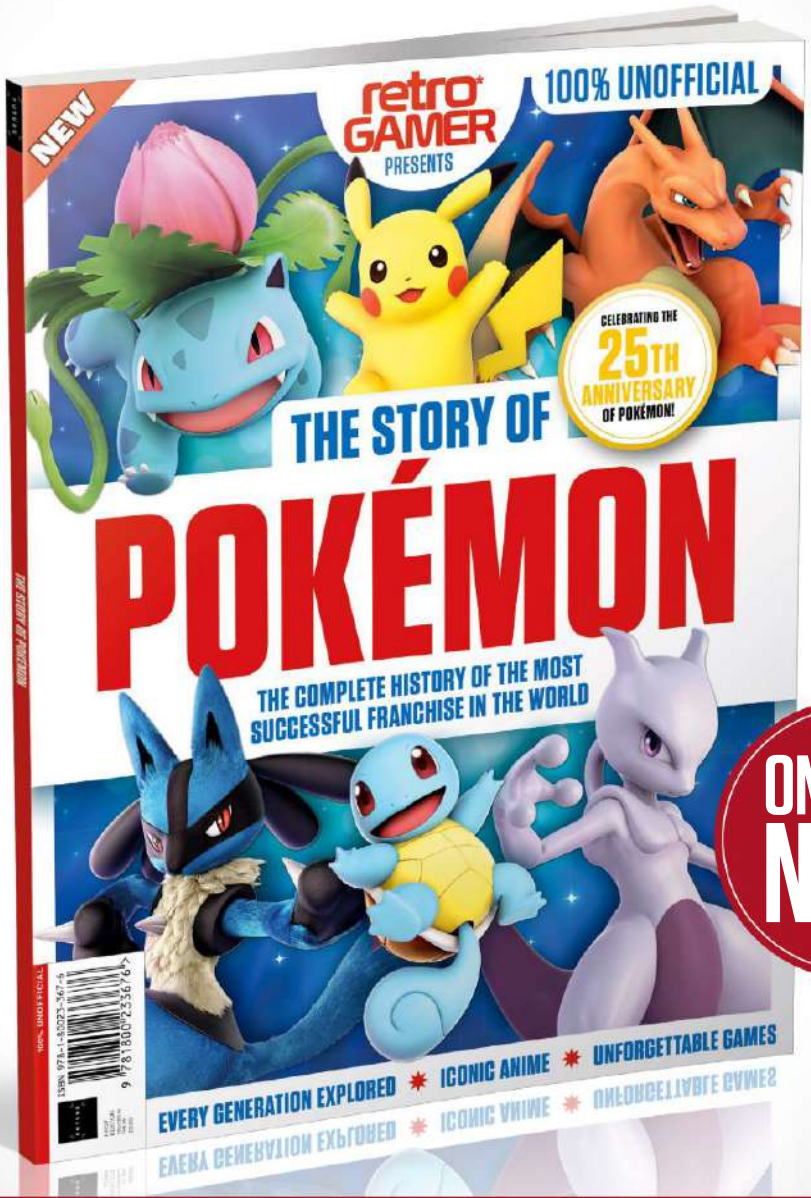
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HOT TOPIC

RETROBATES MULL OVER THE SCENE'S MOST INTRIGUING ISSUES

DIFFICULTY IN GAMES

How challenge in gaming has changed over the years

DARRAN JONES

NICK THORPE

TIM EMPEY

We've recently seen a lot of online discourse around the issue of how difficult videogames should be, and whether or not modern games can even be said to be challenging with the gamut of assistive features many games now offer. Could this be where a trio of crusty old gamers set the world to rights?

NICK

Games today aren't as tough as the ones we grew up with, by and large. How do you feel about that?

DARRAN

My biggest issue with modern games is that they hold you by the hand too much. I remember starting *Assassin's Creed III* and it was tutorial after tutorial after tutorial. I didn't bother with it and I've not played a game in the series since. Life's too short.

TIM

I'm fine with it. It's more about quality of life – not having to replay a whole stage thanks to checkpoints and save points, and lessening the frustration you'd often get in older games.

DARRAN

That's a really good point about the quality of life aspects. I remember bouncing hard off *Ys* on the Master System when it first came out because mapping all the dungeons was a massive pain in the arse. With the new *Sega Ages* version there's an auto-mapping option which is a brilliant addition.

» [NES] Some games like *Battletoads* weren't intentionally hard, the developers just balanced against their own crazy skill.

NICK

Agreed. As an adult with other things to do, I don't want to be stuck in one place for ages – though that's more with story heavy games than arcade-like experiences. As a kid I'd never lower the difficulty, but I'm more inclined to if I'm given the option after a few deaths these days.

TIM

I think the most recent, and possibly extreme, version of this will be in *Psychonauts 2* where you'll be able to make yourself invincible or dish out more damage etc.

DARRAN

Yeah there definitely seems to be a focus from developers now to ensure you actually get a chance to finish their game. I remember being quite annoyed about permadeath being removed from the *Fire Emblem* series until I realised it's simply an option. I think options are always good in games because they should be about choice.

NICK

Absolutely! I saw someone on Twitter claim that if you beat the game using these difficulty options, you're disrespecting the intent of the developers. That's nonsense – these options were included by the developers, they're not Game Genie codes.

DARRAN

I went through a stage where I was completing lots of games on easy mode because I couldn't be arsed to keep replaying difficult sections. I think the modern phrase is story mode, which makes more sense because that way you can enjoy the story. Don't you dabble with the *Dark Souls* games, Tim? They're a whole different kettle of fish.

» [Arcade] It's fair to say the lower difficulty level today is partly because developers no longer need to grab your coins.

TIM

Yep, I completed *Dark Souls I, II* and *III*, but the last boss on *Sekiro* destroys me and I can't deal with the multiple stages of the fight, and the slightly annoying run up to get to him. But still there's some pride and relief (smugness?) to be had when you've battered your way through a difficult game and eventually beaten it.

DARRAN

I was one of the cool kids who picked up the Asian version of *Demon's Souls* before people were getting really excited about it. I never really managed to get into the later games though as I found them too clunky. What's your thoughts on the series, Nick?

NICK

I've not actually tried any of them as they just don't look like my kind of thing. I do like some of the modern wave of deliberately challenging games getting released though, particularly platformers like *Celeste*.

DARRAN

Celeste is a good shout. I've recently been playing *Hollow Knight* and that's a solid Metroidvania with some brutally tough bosses. I'm currently stuck on a particularly difficult boss and I'm not sure if I'll go back to it. Are there any games you've recently giving up on because of brutal difficulty spikes, Tim?

TIM

I noped out of games like *Celeste* and *Hollow Knight*. In *Hollow Knight* I saw a room full of spikes and went, 'Fuck that.'

DARRAN

You mentioned *Psychonauts* earlier and it reminded me of how frustratingly difficult point-and-click adventure puzzles could be. We all remember the goat puzzle from *Broken Sword*, but did anyone else get stumped by puzzles in adventure games?

NICK

Oh yeah, *Discworld* in particular had some shockingly obtuse solutions. It's in keeping with the humour of the series, but it was awfully irritating.

TIM

I also tried *Discworld*, I don't think I got out of Rincewind's bedroom.

DARRAN

Why couldn't you get out of his bedroom? Seems harsh.

TIM

I don't know, even to this day. I poked the Luggage a lot…

DARRAN

What you needed was a cheat mag mate. Do those things even exist anymore?

NICK

I think GameFAQs and YouTube guides killed them off, sadly.

Follow us online so that you can join in the discussions

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» [PS5] Those who seek a challenge tend to flock to From Software's *Souls* series these days.

» [Switch] Nick actually carried on this game for at least 45 minutes after the timer stopped counting.

TIM
Kids today, not knowing the confusion and frustration of getting stuck in *Tomb Raider* until a new issue of *PowerStation* came out. Jammy bastards.

DARRAN
I must admit I would have never completed the Water Temple in *Ocarina Of Time* without Mel reading out the instructions from a Prima guide for me.

NICK
So which game would you brag about having beaten, based on how difficult it is?

TIM
God Hand. On Hard. Twice!

DARRAN
I don't think I've ever completed a knowingly tough game. I managed to get halfway through *Dark Souls* on Switch. Does that count?

TIM
No.

DARRAN
But it was really hard.

TIM
I've finished it three times.

DARRAN
I know. I completed *Sabre Wulf* on *Rare Replay*. I used to annoy everyone in the office because I would call it the *Dark Souls* of Spectrum games. (I did use the rewind feature, though.)

NICK
Not really a traditional answer, but the speed cap can't kill me on *Puyo Puyo Tetris*. I could play Marathon mode infinitely, but I got bored after 2,000 cleared lines and the timer topping out at 59:59.99

TIM
Wow!

DARRAN
And that's why no one ever plays puzzles games with Nick!

» [Mega Drive] Of course, some games would just be made super tough so that people couldn't complete them in rental periods. *The Lion King* is a good example.

» [PS2] Tim's divine skills enabled him to take down Capcom's notoriously tough brawler *God Hand*.

» [PlayStation] A colleague of ours beat *Tomb Raider* without saving or using healing items, though it did take him 67 attempts.

READERS REACT

Has age changed your relationship with tough games?

Rev Phil Richardson
Absolutely yes. I don't have time to repeat a section over and over again until I've mastered it, I just want a quick enjoyable blast for a few minutes. I'll often choose easy mode as I would rather enjoy something than be brilliant at it.

Kraig A Keller
Most of the titles we revere from back in the day got the difficulty right and pointed the way for all that followed. But the ones that got it wrong? On a good day, they're 'hidden gems', and on a bad day they're just frustrating, undesirable, and/or lost in the deluge of time.

John Maguire
It doesn't matter how tough they are. I just need them to be shorter. I can't spend the hours I used to on them, and can't set aside hours to do the tutorial, remember all the controls before I even get a chance to play the game.

Luke Middleham
I think there's a much wider variety of games around today. A game that's too tough and requires repeated attempts will probably get tossed aside for the next big thing. Back in the day you didn't have that luxury so you pushed on with the game you had.

heaven is a truck
I much prefer the expectation many SNES/MD era games had that you would have to play sections over and over again and slowly improve each time. That is much more satisfying than a lot of the hand-holding in modern games. Some modern indie games still have that sensibility, though.

André Verwey
Sure, they were hard to finish, with no option to save or checkpoints, and as a kid I had plenty of time to master a game. Nowadays I have loads of games but less spare time, so I don't make it too hard for myself anymore.

Dr Goggles
I hardly finished any 8-bit games. They were a real challenge in the Eighties! These days they are too tough for me, I'd rather make progress in a game than be stuck early on and not seeing most of the game.

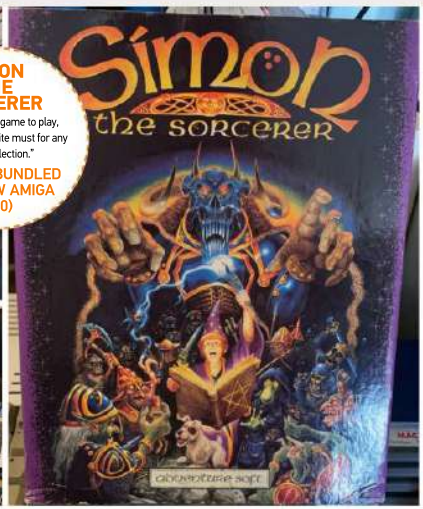
Daniel Betts
Games these days have a lot of options and I don't think that can be seen as a bad thing, but regardless I think developers should have the freedom to make the game they want, even if that goes against what the average consumer thinks is best.

COLLECTOR'S CORNER

READERS TAKE US THROUGH **THE RETRO KEYHOLE**

SPACE HULK
"Had this as one of the first games for my original Amiga. I've loved Games Workshop since I went to its first shop in the Broadmarsh Centre in Nottingham way back in the late-Eighties!"
PAID: £10

SIMON THE SORCERER
"Still a fantastic game to play, even now. A definite must for any decent collection."
PAID: £0 (BUNDLED WITH NEW AMIGA 1200)



AMIGA ADORATION

Collecting and refurbishing all things Amiga

BIO

NAME:
Phil Ayres

LOCATION:
Nottinghamshire

FAVOURITE GAME:
The Settlers

FAVOURITE SYSTEM:
Amiga

COLLECTION WORTH:
£10,000

TWITTER:
@PureAmiga

THE SETTLERS
"For some reason the actions of building and conquering just resonate. I can still play it for hours when I want to chill out."
PAID: £0 (PART OF A LARGE COLLECTION)

We think it's fair to say that this month's collector, Phil from Kirkby-In-Ashfield, Nottinghamshire, is an Amiga nut. "I've got an Amiga 500, 500+, rebuilt 2000, rebuilt and recapped 4000, Amiga 1200, recapped 600, CD32, CDTV and an Amiga 3000 motherboard on its way from Canada," he grins. When you factor in the rest of Phil's collection – Commodore 64s, Ataris, Texas TI99 4/As and various Sinclair models, it's clear there's a lot of retro computer love going on here. "I began collecting in the early Nineties, but life happened and the collection fell by the wayside. Then two years ago, a good friend located a very nice Amiga 1200 for me and I've just started rebuilding the whole collection."

Now safely back in the collecting saddle, Phil has begun collecting big box games as well as machines. "I have every *Alien Breed* big box original version of the game released, to my knowledge. It took some finding, but I love the artwork." Given his admiration for the work of artist HR Giger, it's no surprise the Team 17 classic is a favourite of Phil's, yet his holy grail remains Mindscape's *Moonstone*. "Superbly rare and stupendously expensive to get hold of! But as a collector, it's one to be had."

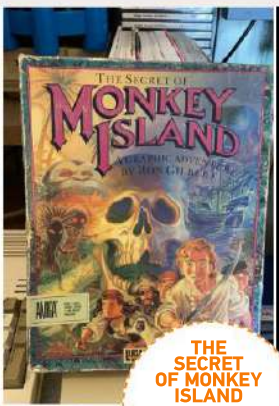
Phil was technically late to the Amiga, purchasing his first 600 in the summer of 1992, but he was soon fully rapt with the surrounding scene. "We started to form the idea of an online group of like-minded individuals, and eventually we were reviewing products and writing blogs on our webpage, Pure Amiga." So what endears him to the Commodore 16-bit machine in particular? "The user base and the ability of people to create new items from scratch for the platform, and I think [that's] got better – the existence of GitHub, 3D printers, social media and open-sourced projects makes this aged platform still viable, fun and, most importantly, loved and cared for by enthusiasts worldwide."

As Phil outlines above, his Amiga collection is what dominates his retro room and most of them have been refurbished by the man himself as part of his venture, Pure Amiga. "Anyone who knows me knows how well I refurbish these lovely Amigas," he says proudly. "To fund my collection, I buy, refurbish and sell certain items that I already own – a good friend of mine says that I get them 'Ayres clean!'" While the business of recapping is left to Phil's friend and the other half of Pure Amiga, Chris, the life of these wonderful computers is being extended immeasurably. "I like to bring an Amiga back to factory fresh – I don't believe in chemical 'retrobriting' as to me the action of the chemicals on aged plastic is not something I want to inflict on these machines. But I do like every Amiga that crosses my path to be as clean and bright as possible," Phil concludes. "Plus, with the motherboard works, we are hopefully elongating their life spans enormously."

For Amiga parts, repairs, history and more check out Chris and Phil's site: www.pureamiga.co.uk

Got an impressive collection of your own? Contact us at:
RetroGamerUK @RetroGamer_Mag retrogamer@futurenet.com

ZOOL
"Who doesn't love Zool? I bought a 1200 back in the day just so I could play it."
PAID: £0 (BUNDLED WITH NEW AMIGA 1200)



THE SECRET OF MONKEY ISLAND
"The original big box release, including the Dial-A-Pirate anti-piracy wheel."
PAID: £80

JEWEL IN THE CROWN

DARKSEED

■ "I've loved Giger's work since his original concept drawings for *Alien*. There is no greater conceptual artist in my mind. I just had to have *Darkseed* and was lucky enough to buy both, big box and CD32."

PAID: £200

BARGAIN HUNT

Your guide to the rising world of retro prices

THE COVER STAR

NINTENDO 64

In light of THAT *Mario 64* auction, prices for the Nintendo 64 continue to rise, although it still lags some way behind its forebear, the SNES. A good-condition loose console plus controller remains unlikely to set you back more than **£50** while boxed consoles complete with inners and original literature should still come in at under **£100.** Chuck in some extra controllers and games, however, and things quickly escalate.

DIZZY

The ubiquity of the *Dizzy* games ensures that most of them remain available at low prices. There are exceptions, of course – a Spectrum copy of *Spellbound Dizzy* recently sold for **£70** on a Sinclair Facebook sales group – but generally, if you're after some ovoid action, you shouldn't have to pay much more than a fiver.

CASTLE MASTER

Most of the 8-bit versions retail for no more than five pounds, although with The Hit Squad collecting still popular, this budget version can often lead to prices of over **£50** for its re-release. 16-bit disk versions will set you back a few more pounds but still regularly come in at under **£20.**

DOUBLE DRAGON II: THE REVENGE

Loose NES and Game Boy carts can usually be high-kicked down for under a tenner but if you're after a mint boxed copy expect to shell out a lot more. After some bargain basement punching action? The Tronix Spectrum release is available for peanuts.

THE SIMPSONS: BART VS THE SPACE MUTANTS

Lots of variable formats for this *Simpsons* tie-in ranging from the ZX Spectrum to the Sega Mega Drive. Weirdly they all still sell for about the same price although a boxed and mint NES copy will set you back a bit more at around **£20-£30.**

GHOSTHUNTER (PS2)

Like many PlayStation 2 games, this spooky and underrated horror game is as cheap as chips. You can add this to your collection for just **£5,** assuming you ain't 'fraid of no ghost.

HOW MUCH?!

TEKKEN 2

This PlayStation auction raised our collective eyebrows this month. OK, it's new and sealed, but the double box version of this beat-'em-up sequel, which sold for **£1,910** is certainly not rare by any means. With unsealed but mint copies going for **£10-£15,** it seems like some extreme price inflation just for the honour of shrink wrapping.

Prices correct at time of print

SOUND INVESTMENTS

How licensed soundtracks have developed Nick's musical taste

As much as I love gaming, life would be dull if it was the only thing I was interested in, and you might have guessed some of my other interests if you're a long-time reader. My TV diet consists primarily of comedy and wrestling, and despite the fact that following the news makes me distinctly unhappy, I retain an interest in politics. However, the thing I don't think I've spoken about too much is how much I like music. I actually buy around 50 CDs each year, and a couple of years ago I even contributed a piece to *Metal Hammer*. But of course these interests don't exist in isolation, and just as I enjoy political comedies and the weird trend of bringing signs about Japanese RPGs to wrestling events, there are definitely acts that I wouldn't have discovered had their music not appeared in games.

Like so many people, my first major experience with licensed soundtracks came with the *WipEout* series. I might be a bit too young to have experienced all of the pleasures that early Nineties raves had to offer, but the first group I ever loved was The Prodigy – *Experience* was the first album I ever got, on tape at the age of nine. I was thrilled that *WipEout 2097* featured *Firestarter*, but more importantly the game was my gateway to The Chemical Brothers, to the point that I ended up picking up their album *Surrender* before I bought *Wip3out*. I also picked up Fluke's *Atom Bomb* single, probably at least in part because of the artwork inspired by the game.

Staying on the theme of electronic music, *Rez* was another big one for me. The final stage of that game is a totally unforgettable experience, thanks to the striking visual theme of evolution and the Adam Freeland track *Fear* that accompanies it. Frustratingly, the *Rez* version has never been properly released, not even on the official soundtrack album, but I did end up picking up the album *Now & Them*, which features a rather different alternative version named *Mind Killer*. I also ended up grabbing a CD by Ken Ishii, who contributed the Area 3 track *Creation The State Of Art*. The spiritual successor to *Rez*, *Child Of Eden*, featured a soundtrack by director Tetsuya Mizuguchi's band Genki Rockets and I ended up picking up both of those albums too.

As you might have guessed already, a lot of what I listen to falls under Darran's broad categorisation of 'loud' music, and gaming has been just as helpful there. I was already aware of The Offspring by the time *Crazy Taxi* came out – it was kind of impossible to avoid *Pretty Fly (For A White Guy)* in 1998 – but I'd never heard Bad Religion before, and between that and *Tony Hawk's Pro Skater 2* I ended up hooked.

It's not just good games that have introduced me to music, either. Capcom's Dreamcast brawler *Heavy Metal Geomatrix* is definitely something I'd classify as a guilty pleasure, but it sold me four albums – half of the fun of the game is battling to some pretty epic metal, after all. The best work of the forgotten Brooklyn act Dust To Dust is on there, and it was also my introduction to Corrosion Of Conformity and the solo work of Judas Priest's Rob Halford. Likewise, *WWE Smackdown Vs Raw 2007* on PSP was blighted with long loading times and I became rather reluctant to play it after having invested quite a lot of time into season mode with Chris Benoit, but I never forgot hearing Black Stone Cherry's *Lonely Train* during the matches. By the end of 2007, I'd seen them live and picked up their first album, and I haven't missed an album since.

I don't catch everything first time around, either. While researching issue 194, I watched a video of *Burnout 3* that had replaced the in-game audio with Cubanate's *Skeletal*. That triggered a memory of having heard it in *Gran Turismo*, and soon I'd gone down the rabbit hole of finding out which of their tracks were in that game, and then buying a lot of CDs. Incidentally, the *Burnout* series has given me at least one musical nightmare too. A housemate of mine who loves practical jokes loaded my *Burnout Dominator* save and disabled every song but the English, Spanish, Japanese and Mandarin versions of Avril Lavigne's infuriating *Girlfriend*.

The only sad thing is that all this licensed music eventually causes rights problems down the line. Publishers either have to stump up the cash all over again or remove the licensed music, which is essentially akin to ripping out the heart of a game like *Crazy Taxi*. I'd love to stream *Def Jam: Fight For New York* because throwing people in front of trains is hilarious, but I don't want any copyright strikes on my Twitch channel. Would you believe that even *Dead Or Alive Xtreme Beach Volleyball* has the Spice Girls and Bob Marley on its soundtrack? It surprised the heck out of me, that's for sure. But that's the thing – by finding music in unexpected places I've been able to expand my tastes, and I'm always looking forward to my next new discovery.

RETCON REMIX

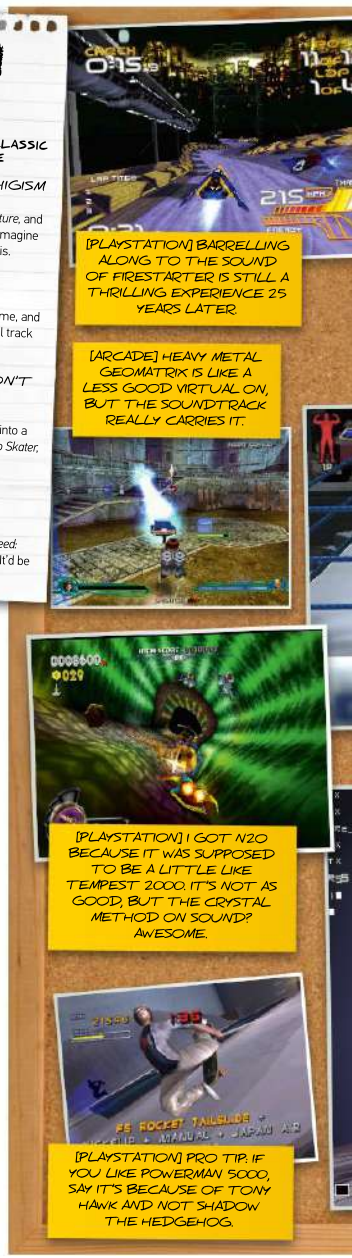
THE TRACKS I'D SHOEHORN INTO CLASSIC GAMES IF GIVEN THE CHANCE

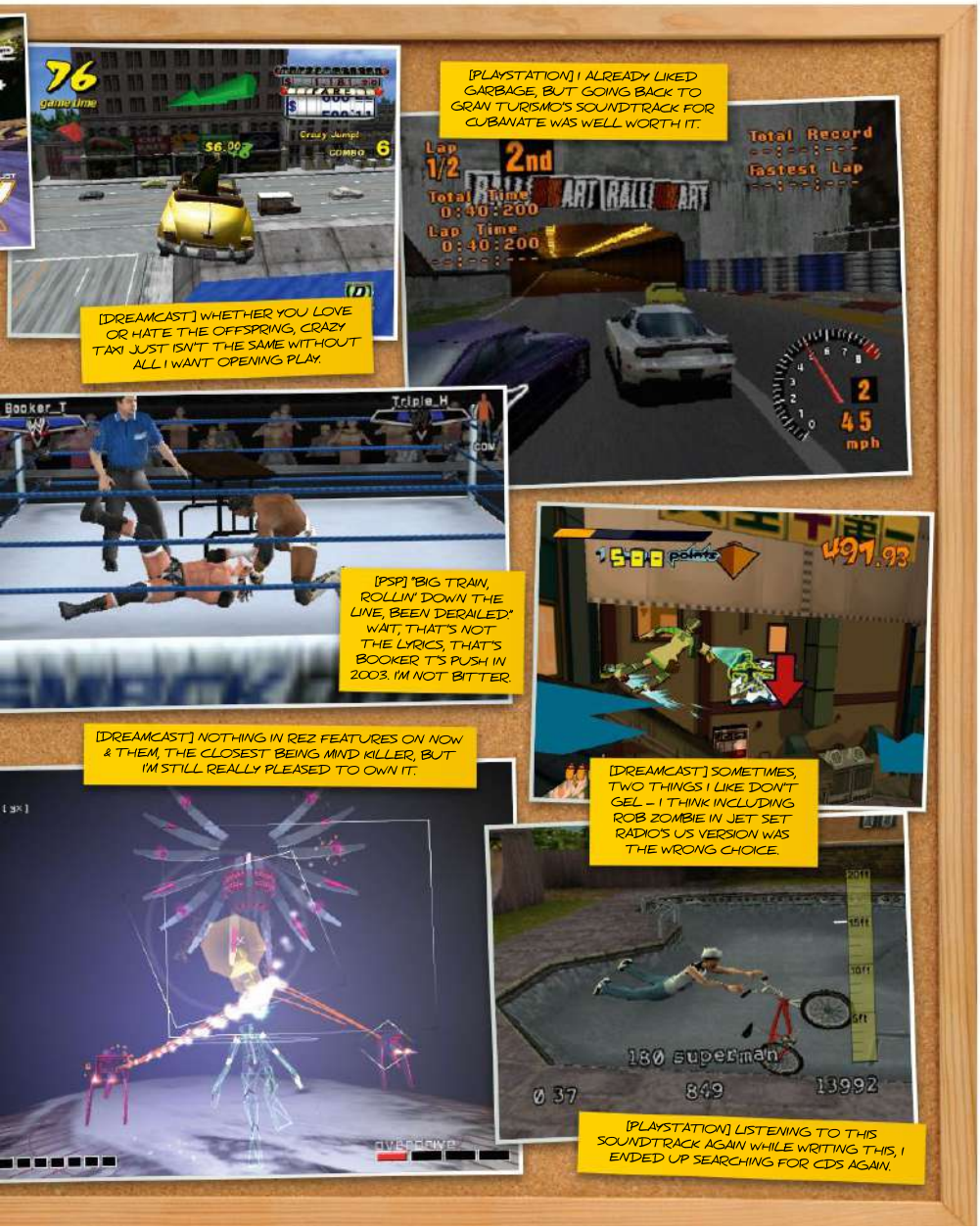
KAQRIYOTERROR – MAKAFUSHIGISM
https://bit.ly/RG_kaqriyo
This one would go straight into *Jet Set Radio Future*, and would play in the night-time areas – I can just imagine chasing Rapid 99 around 99th Street to this.

ZERO 7 – GIVE IT AWAY
https://bit.ly/RG_zero7
Sometimes I want to relax with a nice puzzle game, and the music needs to fit the bill. This instrumental track would be perfect to play *Picross* to.

ROADRUNNER UNITED – I DON'T WANNA BE (A SUPERHERO)
https://bit.ly/RG_roadrunner
As well as being in the right kind of genre to fit into a classic extreme sports game like *Tony Hawk's Pro Skater*, it's just the right length at two minutes.

WHITE ZOMBIE – SUPER CHARGER HEAVEN
https://bit.ly/RG_whitezombie
This was in a prototype version of *Need For Speed: Most Wanted* (2005), but didn't make the final cut. It'd be fantastic in a fast-paced racer of that kind.


[PLAYSTATION] BARRELLING ALONG TO THE SOUND OF FIRESTARTER IS STILL A THRILLING EXPERIENCE 25 YEARS LATER.
[ARCADE] HEAVY METAL GEOMATRIX IS LIKE A LESS GOOD VIRTUAL ON, BUT THE SOUNDTRACK REALLY CARRIES IT.
[PLAYSTATION] I GOT N2O BECAUSE IT WAS SUPPOSED TO BE A LITTLE LIKE TEMPEST 2000. IT'S NOT AS GOOD, BUT THE CRYSTAL METHOD ON SOUND? AWESOME.
[PLAYSTATION] PRO TIP. IF YOU LIKE POWERMAN 5000, SAY IT'S BECAUSE OF TONY HAWK AND NOT SHADOW THE HEDGEHOG.


[DREAMCAST] WHETHER YOU LOVE OR HATE THE OFFSPRING, CRAZY TAXI JUST ISN'T THE SAME WITHOUT ALL I WANT OPENING PLAY.
[PLAYSTATION] I ALREADY LIKED GARBAGE, BUT GOING BACK TO GRAN TURISMO'S SOUNDTRACK FOR CUBANATE WAS WELL WORTH IT.
[PSP] "BIG TRAIN, ROLLIN' DOWN THE LINE, BEEN DERAILED." WAIT, THAT'S NOT THE LYRICS, THAT'S BOOKER T'S PUSH IN 2003. I'M NOT BITTER.
[DREAMCAST] NOTHING IN REZ FEATURES ON NOW & THEM, THE CLOSEST BEING MIND KILLER, BUT I'M STI'LL REALLY PLEASED TO OWN IT.
[DREAMCAST] SOMETIMES, TWO THINGS I LIKE DON'T GEL – I THINK INCLUDING ROB ZOMBIE IN JET SET RADIO'S US VERSION WAS THE WRONG CHOICE.
[PLAYSTATION] LISTENING TO THIS SOUNDTRACK AGAIN WHILE WRITING THIS, I ENDED UP SEARCHING FOR CDS AGAIN.

HAVE YOU DISCOVERED MUSICIANS THROUGH LICENSED SOUNDTRACKS?

How games have introduced our readers to their new favourite acts

Retro Bit Coach
Madden 2003 had *The Anthem* by Good Charlotte. Since the game was released at the same time as their single *Lifestyles Of The Rich And Famous* was hitting MTV, I had two easy reasons to buy the album that October and eventually see them on tour. I followed them long after.

Fritz T Montecristo
I went and bought CDs by Ozzy Osbourne, Guns N' Roses and Ice Cube because of the radio stations in *Grand Theft Auto: San Andreas*. And don't even get me started on all the artists I discovered through the *Guitar Hero* games...

Thomas Touzimsky
The *WipEout* soundtrack compilation I borrowed from a friend introduced me to The Chemical Brothers, Sunscreem, The Shamen, Hardfloor, Leftfield and a couple more which I still listen to these days, and I will never grow tired of repeating this story.

Reseticus Paulious
I first heard Bomb The Bass on *Xenon 2* on the ST and got really into their (or his) music after that.

Alex79, OK?
I listened to a lot of Combichrist after playing the *Devil May Cry* reboot. Pretty harsh, industrial noise. It was great! Also Carpenter Brut and Perturbator after playing *Furi* and *Hotline Miami*, both awesome.

Luke Weaver
Infected on PSP had an amazing metal soundtrack! I first discovered The Agony Scene on there, with their track *Prey*. That machine gun snare drum intro still gets me going!

MAILBAG

HAVE YOUR SAY... SEND US A LETTER OR MAKE YOURSELF HEARD ON THE ONLINE FORUM – **WWW.RETROGAMER.NET**

WIN!

Every month, one lucky writer-in will receive a spanking copy of either our NES/Master System or SNES/Mega Drive books

STAR LETTER

HONESTY IS THE BEST POLICY

Hey **Retro Gamer**,
I was so sorry to hear about Jason. What devastating news. His passion and expertise always shone out of the Homebrew section. I hope his family and friends are coping OK, and that you guys at **Retro Gamer** are all managing to look after yourselves too. As much as I love the magazine I hope you are all putting yourselves and your wellbeing first.

I must say, the last few issues have been so good, particularly in the face of such challenging circumstances. The interviews with Violet Berlin and Charles Martinet were two of the best you've ever had. Both so likeable and positive and life-affirming, I could happily have read a whole magazine's worth for each of them. And then hearing Nick's nostalgic reflections on Sonic (amazing mini booklet too), and Darran's on the Saturn in the latest issue. Such heartfelt and honest accounts, and all the more powerful for it.

It made me wonder one thing. If you could do it all again, somehow start another life from scratch – which previously-overlooked game, series or console would you want to experience properly? For me *The King Of Fighters* is a contender. I'm a total *Street Fighter* nut but I somehow never found time to delve into *KOF*. I'd love a chance to discover the wonderful roster of characters, the moves, the play mechanics, the plotlines… maybe one day, perhaps when I'm retired!

Very best wishes to you all. Stay safe and stay well.
Tim Fitches

Thanks very much for the kind words, Tim. We're glad you're enjoying the magazine still and it's pleasing you feel the quality is so high. In regards to your question, Darran would love a Sharp X68000, Nick would love to tackle the *Earthbound/Mother* series, Tim regrets not experiencing the *Monster Hunter* series from the beginning while Andy would like his mind wiped so he could experience *Rings Of Power* all over again.

» [Neo Geo] Tim Fitches would very much like to delve into *The King Of Fighters* series.

» It would appear that readers enjoyed Darran's article as much as he loves his This Is Cool Saturn.

SATURN LOVING

Dear Darran,
I really enjoyed reading your piece on the Sega Saturn, it was also sad to read how you suffered from depression in such a bad way. I have also suffered with it and know how you must have felt. It seems you had a loving family around you and I would just like to say how proud of yourself you should be in bringing out a fantastic magazine which is such an amazing read every month and brings joy and happiness to thousands. Thanks for that, and I hope you continue to stay well and happy.

All the best mate,
Kelvin Courtenay

Thanks for the kind words, Kelvin and we're sorry to hear you've also suffered from depression. We wanted the My Retro Life section of the mag to better represent ourselves personally, and we've been genuinely overwhelmed by the response from it. Stay safe and take care.

HOLIDAYS AT HOME

Dear **Retro Gamer**,
Like many of us, I haven't had a proper holiday in quite a while but fortunately my gaming collection has given me plenty of escapism from the weekly drudgery of working from home during lockdown.

I recently finished the little-known *Red Dead Redemption II* and man, was it some adventure. So much so that toward the finale I realised how much I would miss running around those virtual plains, hunting those virtual squirrels and generally soaking up the amazing slice of 19th century Americana that Rockstar had created.

» Yes it's a new game, but we love the idea behind Aaron's photograph book and would love to flick through it.

I decided that seeing as this was the closest thing to a vacation that I'd had recently, and the fact it was such a memorable experience, I would create a 'Holiday Memories' photo album of my lovely in-game screenshots. Check it out.

In years to come I can look back and remember my epic adventure in vivid detail, in fact if I show my nan the album I'm sure she will think I actually travelled back in time somehow and learned to ride a horse. Of course my friends think I'm quite, quite mad but I wonder if anyone else cherishes their gaming memories in a similar way?
Aaron Gillman

What a great idea, Aaron. Darran's been wanting to explore *Red Dead Redemption II* since reading an article about how you could go birdwatching in it, so you've given him the incentive to pick up a copy on PC.

GETTING THE TWITCH

Hi **Retro Gamer**,
Reading Iain Lee's column about watching Twitch made me investigate it myself and there's a wealth of retro gaming content on there for all tastes. I've enjoyed watching Grayskull83's speedruns and have been impressed

» Nick is far more hardcore than Darran, so he streams obscure PS2 games using real hardware.

Don't forget to follow us online for all the latest retro updates

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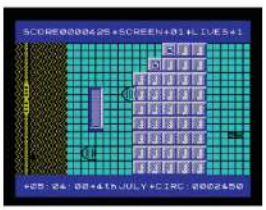
by the likes of Gillaxian, who focuses on arcade games like *Golden Axe*. I've made new friends thanks to Twitch and it's made it a lot easier to deal with lockdown as well. I know you did an article on YouTube channels many years ago and it would be fantastic if you could cover the retro side of Twitch at some point as well. I'm sure there would be plenty of interest in it.
Jason Turner

We're glad you've been enjoying Twitch, Jason and it's certainly something we can consider covering in the future. Both Nick and Darran stream now and have found it a good way to deal with lockdown. We'll do a little more research and look at putting something together.

LIKE A PIG IN...

Hi guys,
I was reading your *Oink!* article in issue 221 and it brought back some old memories. You mentioned that the ZX Spectrum version was done by Wise Owl Software and, in around 1990 I met a guy I think who was called Bob. He worked at Wise Owl and he mentioned that he was making a version of Mastertronic's *Ninja* for the 2600. I lost contact with him after about a year due to going off to study graphic design and, I heard later that he sadly passed away. I was wondering though if you'd ever heard of this 2600 conversion and if it was ever finished? Thanks a lot and keep doing what you do.
Craig Elliott



» [ZX Spectrum] *Oink!* isn't the most well known of titles, but Craig certainly enjoyed reading about it.

We're glad you enjoyed the *Oink!* article, Craig. We've never heard of the Atari 2600 version of *Ninja* you've mentioned. We'll ask some of our Mastertronic contacts and try to get more information. Thanks for bringing it to our attention.

DISCUSSED THIS MONTH

Rising prices

Recent silly prices for sealed games have had the team looking at their own collections. Tim's games are all on Game Pass, Andy's consist of *Bannerlord*, so that just leaves Darran and Nick. Darran has a sealed *Fire Emblem: The Sacred Stones*, which is probably worth a few bob, but Nick trounced it with the revelation that he has a sealed copy of *Michigan: Report From Hell*. Wowsers!

» [GBA] Darran once bought *The Sacred Stones* for £5 from Game. Sadly, he paid a lot more for his new copy.

Your say

Every month, Retro Gamer asks a question on social media and prints the best replies. This month we wanted to know…

What's the most technically impressive N64 game you've played?

David Cameron
WWF: No Mercy for me. That game is packed full of content. One of the deepest wrestling games of its time and it was on an N64 cartridge. Not even *Smackdown* was as impressive.

Kieran HJ Connell
It's not my favourite game, but *Conker's Bad Fur Day* is easily the most technically impressive. There's a reason it came out so late in the console's lifetime, everything is highly custom including microcode to support projected textures and lighting. Looks amazing!

Ainsley Bowstead
I'm not normally one for fiddling with graphical settings, but I put *Perfect Dark* into widescreen with high-res graphics and it looks gorgeous.

Evelio Sospedra
Perfect Dark looks like a GameCube game.

ACO
F-Zero X. Yeah, the visuals had to be toned down for it to work, but can you name any smoother or faster N64 game?

Stephen Doherty
Rogue Squadron still looks amazing.

Andy Endean
I think the water effects in *Wave Race 64* were outstanding; they still hold up well today. The difference between the beautiful stillness of the first track and the crazy choppiness of the last almost made it feel like two different games.

Adam Jones
It's not the best port, but how they managed to squeeze *Resident Evil 2* into an N64 cart was remarkable.

retrospiel
Mario 64 – it is perfection, both technically and aesthetically. So much so, that during the early days of the N64 people were half-jokingly speculating that the console's hardware was designed around the game, not vice versa. It still looks great today.

Mairead Ralph
It'll always be *Zelda: Ocarina Of Time* for me (*Majora's Mask* just has some pretty paint over *Ocarina's* foundations). How that cart can squeeze a WHOLE world and those dungeons in still amazes me to this day.

» [N64] It's astonishing to think that Angel Studios crammed virtually all of *Resident Evil 2* into a 64MB cart.

Alan David Dawkins
Wave Race still looks and feels great today.

Trent Langley
Resident Evil 2. Even though it's not graphically identical to the PS version, the fact that they were able to fit two discs worth of content on one cartridge is amazing.

Alex Cogston
I remember thinking *Perfect Dark* was next-level at the time.

retro GAMER

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ENDGAME

REAL BOUT FATAL FURY 2 – MAI'S ENDING

» SNK's scantily clad ninja is a prolific fighter, showing up in every entry in the *King Of Fighters* series, seven *Fatal Fury* games, and also in games like *SNK Gals' Fighters*, *SNK Heroines* and *Dead Or Alive 5*. But while you might think she gets about a bit, that's strictly professional – when it comes to matters of the heart, there's only one thing she's after. Let's see what it is...

01

» Mai Shiranui stands triumphant, having bested Geese Howard in spite of all his overpowered moves. Random celebratory words serve as a somewhat strange background for her victory pose, but English was never SNK's strong suit.

02

» Here's the object of Mai's desire, Andy Bogard – an American ninja who trained with Mai under her grandfather Hanzo. It seems like she's finally got her wish too, as they're dressed for the wedding she has always wanted.

03

» Although the traditional wording is "you may now kiss the bride", it's Mai who is far more eager to claim her first kiss as a married woman. Together, Mai and Andy will carry on the legac of the Shiranui ninja clan.

04

» But wait, what's this? *Fraudulence!* As Mai wraps her arms around her new husband's neck, his long, flowing blonde hair is revealed to be nothing more than a sham – a wig concealing the fact that Andy is actually bald. This shocking revelation may be too much for Mai to cope with.

05

» It's about 1:20am, there's nobody around. Mai wakes with a start, shocked by the events conjured up in her mind. Apparently, her brain had decided to not only dream up her ideal wedding, but also a way to ruin it. Why can we never have nice things, even in our imaginations?

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